

UNIVERSITY OF CALIFORNIA
MUSEUM OF VERTEBRATE ZOOLOGY

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1940 ~~1941~~ 1942

Part I

Catalogue (nos 2334 - ³⁴⁹⁰~~2833~~), Itineraries,
Species Lists, etc. (chronological
order).

Part II

Species accounts

Amphibians and reptiles, in
alphabetical order.

~~Birds - 1 sheet, reference to
notes in Part I.~~

~~Mammals - 1 sheet, reference to
notes in Part I.~~

Part I

J. Rodgers - 1940

1 mi. NW Alamo, 300 ft.,
Contra Costa Co., Calif.

Jan. 14, 1940

2334 *Batrachoseps attenuatus*

2335 " "

2336 " "

2337 " "

2338 " "

2339 " "

2340 " "

2341 " "

2342 " "

2343 " "

2344 " "

2345 *Aneides lugubris*2346 *Ensatina eschscholtzii*2347 *Hyla regilla*

2348 " "

2349 " "

3 1/4 mi. (by road) NNW Vacaville,

Solano Co., Calif.

Mar. 2, 1940

2350 *Triturus*

2351 "

2352 "

2353 *Aneides*2354 *Batrachoseps*

2355 "

2356 "

2357 "

3 mi. NW Vacaville
Solano Co., Calif.

Mar. 2

- 2359 *Batrachoseps attenuatus*
 2360 *Bufo boreas*
 2361 *Sceloporus occidentalis*
 2362 " "
 2363 " "
 2364 " "
 2365 " "
 2366 " "
 2367 " "
 2368 " "
 2369 *Gerrhonotus multicarinatus*
 2370 " "
 2371 *Bufo boreas*
 2372 " "
 2373 " "

6 mi. NNW Vacaville
Solano Co., Calif.

Mar. 2

See John Gray 426-436 (8 *Triturus*, 2 *Bufo*, and 1 *Batrachoseps*). The *Triturus* were all found under boards.

Mar. 3

- 2374 *Batrachoseps attenuatus*
 2375 " "
 2376 " "
 2377 " "
 2378 " "

6 mi. NNW Vacaville
Solano Co., Calif.

Mar. 3

2379 *Batrachoseps attenuatus*

2380 " "

2381 " "

2382 " "

2383 *Sceloporus occidentalis*

2384 " "

7 mi. SSW Winters

Solano Co.,

Mar. 3

2385 *Sceloporus occidentalis*

2386 " "

2387 " "

2388 " "

2389 " "

2390 *Eumeces skiltonianus*

2391 " "

2392 " "

Pleasant Valley, 7 mi. SW Winters
Solano Co., Calif.

Mar. 3

2393 *Batrachoseps attenuatus*

2394 " "

2395 " "

2396 " "

2397 " "

2398 " "

J. Rodgers - 1940

Old quarry, 4 mi. NNE Fairfield
Solano Co., Calif.

Mar. 3

2399 *Batrachoseps attenuatus*

2400

2401

2402 *Aneides lugubris lugubris*

2403

2404

2405

2406

2407

2408

2409

2410 *Sceloporus occidentalis*

2411

2412

2413

2414

2415

2416

2417

2418

2419

2420

2421 *Gerrhonotus multi-carinatus*2422 *Eumeces skiltonianus*

Suisun Cr., 2 1/2 mi. NW Mankas (Mankas Corner),

Solano Co., Calif. Mar. 3

2423 *Thamnophis sirtalis*

J. Rodgers - 1940

4 mi.
Suisun Cr., 480 ft., NNW Manka (Mankas Corner)
in Napa Co., Calif.

Mar. 3

2424 *Triturus* (2424-2444 seined out of overflow pool.)

2425 "

2426 "

2427 "

2428 "

2429 "

2430 "

2431 "

2432 "

2433 "

2434 "

2435 "

2436 "

2437 "

2438 "

2439 "

2440 "

2441 "

2442 "

2443 "

2444 "

2445 " found on ground away from stream

2446 " " " "

2447 " " " "

2448 *Batrachoseps attenuatus*

2449 " "

2450 " "

J. Rodgers-1940

Suisun Cr., 480 ft., 4 mi. NNW Manka (Mankas Corner),
in Napa Co., Calif.

Mar. 3

- 2451 *Nyla regilla*
 2452 *Gerrhonotus multi-carinatus*
 2453 *Diadophis amabilis*
 " "
 2454 " "
 2455 *Eumeces skiltonianus*
 2456 " "
 2457 " "
 2458 " "

Insert from
 p. 157B

4 mi. NE Vallejo
Salano Co., Calif.

Mar. 4

- 2459 *Aneides lugubris lugubris*
 " "
 2460 " "

Insert from
 p. 157B

Marsh Cr., 1000 ft., 4.1 mi. ESE Mt Diablo
Contra Costa Co., Calif.

Mar. 17

- 2461 *Batrachoseps attenuatus*
 2462 " "
 2463 " "
 2464 " "
 2465 " "
 2466 " "
 2467 " "
 2468 " "
 2469 " "
 2470 " "
 2471 " "

Itinerary, etc
Mar. 2, 3.

Vacaville and 1-5 mi. N and NW, Solano Co., Calif.
Mar. 2 about 1:20 p.m. John Chattin, John Gray, and I left Berkeley for a two day trip to Solano Co., primarily to collect skinks. The weather was clear and warm. We drove to Vacaville, then angled off to the NW about 4 mi. by road to a place on the Pleasant Valley road that we figured by map to be 3 mi. NW Vacaville. We collected about 30 specimens of reptiles and amphibians there including 8 skinks. They were under rocks on grassy hillside; some brush nearby. We traveled SW to then to a rocky ridge about $1\frac{1}{2}$ mi. N Vacaville. John Chattin saw one skink there (under a board). We traveled on up N and NW on some little oiled roads, and camped in an abandoned farm yard about 5 mi. NNW Vacaville. Mar. 3, we got up about 6:30, put our specimens in formalin (labeled them) and left about 9:00 a.m. This day we drove to Winters, up Putah Cr. to Pleasant Valley, south to ^{within 1 mi. of} Fairfield and then up Susan Creek. we camped 1 mi. S Lake Curry.

1 mi S Lake Curry, Wapa Co., Calif

Mar. 4, 1940

About 6:30, we got up and gathered up John Chattin's traps. About 9:00, we left for Berkeley, and arrived there about 11:45 a.m.

J. Rodgers - 1940

Marsh Cr., 1000 ft., 4.1 mi. ESE Mt. DiabloContra Costa Co., Calif.

Mar. 17,

2472 *Batrachoseps attenuatus*

2473 " "

2474 " "

2475 *Aneides lugubris lugubris*

2476 " " "

2477 " " "

2478 *Hyla regilla*2479 *Sceloporus occidentalis*

2480 " "

2481 " "

2482 " "

2483 " "

2484 " "

2485 " "

2486 *Eumeces skiltonianus*

2487 " "

2488 *Diadophis amabilis*2489 *Hypsiglena achrachynchus*3.7 mi. SE Mt. Diablo, 1500 ft.,Contra Costa Co., Calif.

Mar. 17

2490 *Batrachoseps attenuatus*

2491 " "

2492 " "

2493 " "

2494 " "

2495 " "

J. Rodgers - 1940

3.7 mi. SE Mt. Diablo, 1500 ft.,
Contra Costa Co., Calif.

Mar. 17,

- 2496 *Batrachoseps attenuatus*
 2497 " "
 2498 " "
 2499 " "
 2500 " "
 2501 " "
 2502 *Gerrhonotus multi-carinatus*
 2503 *Eumeces skiltonianus*
 2504 " "
 2505 " "
 2506 " "
 2507 " "
 2508 " "
 2509 *Gerrhonotus multi-carinatus*
 2510 *Sceloporus occidentalis*
 2511 *Diadophis amabilis*
 2512 *Pituophis catenifer catenifer*
 2513 " " "

Marsh Cr., 1500 ft., 4.1 mi. NE Tassajara,
4.1 mi. Contra Costa Co., Calif.

Mar. 17, 1940

I collected one skink here. It is listed in John Gray's notebook and bears his label number 441.

Pole Cr., 1 $\frac{3}{4}$ mi. NE Fillmore
Ventura Co., Calif.
 Mar. 23

2514 *Nyla*

2515 "

2516 "

2517 "

2518 *Eumeces skiltonianus*

1 $\frac{1}{3}$ mi. NN^E Fillmore (1 $\frac{1}{2}$ mi. W Pole Cr.),
Ventura Co., Calif.
 Mar. 23

2519 *Bufo boreas halophilus*

2520 *Uta stansburiana*

2521 " " tail 13 + 68 mm

2522 *Sceloporus occidentalis*

2523 " "

2524 " "

Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Acc. 6173

7 reptiles from Palestine; gift of Jacob Frenkel

Wadi Debbi, 75 mi. SW Amman

Trans Jordan, Palestine

Summer, 1938

immature, 3-4 weeks old. bred by Prof.

2525 *Agama pallida* - Mendelsson, from parents from above local.

University of Jerusalem

Palestine

3-5 weeks old

2526 *Agama stellio* col. by Frenkel, Summer, 1939

2527 *Contia rothii* col. " " June, 15, 1939

Beit Vegan, Jerusalem,

Palestine

2528 *Contia rothii* June 24, 1939

Handwritten title and introductory text at the top of the page.

Main body of handwritten text, consisting of several paragraphs. The text is written in a cursive script and is mostly illegible due to blurring. A small vertical mark is visible on the left side of the page.

Acc. 6173 (cont.)Wadi Musrara, near Kfar Yehoshu, Valley of Jezreel,
Palestine2529 *Typhlops vermicularis* April 10, 1939

Wadi = creek Kfar = Village

vicinity of Tel Aviv,Palestine2530 *Lythorhynchus diadema* { (died col. Oct 3, 1939)
col. Summer, 1939
immatureJerusalem, Palestine2531 *Tarbophis savignyi* (died Aug. 25, 1939)
col. May, 1939
immature"Cat Snake" - in ItalyMus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.Acc. no 61795 mi. W of Byron,Contra Costa Co., Calif.

Mar. 31, 1940

2532 *Eumeces* ^{*g. rubrivandates*} Collected and brought in by Frank
J. Watson. Taken "Under a rock in open clay
field; Many *Brodiaea laxes* in bloom.Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.Acc. no 61809 mi. E Tres Pinos,San Benito Co., Calif.

Mar. 31, 1940

2533 *Eumeces* - see letter from Henry S. Fitch.2534 " No say that these came from Blue
Oak country.
Mus. Vert. Zool., Univ. Calif., BerkeleyAcc. 6187Marsh Cr., 500 ft., 4.8 mi. E. Mt. DiabloContra Costa Co., Calif

April 7

2535A *Crotalus viridis oreganus*

J. Rodgers-1940

Acc. no. 6187 (cont.)Marsh A, 500 ft., 4.8 mi. E Mt. Diablo,
Contra Costa Co., Calif.

April 7

25358 *Sceloporus occidentalis*

2536

"

"

(2537) *Eumeces*

collected by Jacob Frenkel

(2538)

"

"

"

W. F. Wood

(2539)

"

"

"

"

^{300 ft.,}
Kellogg Cr., 3 1/3 mi. W and 1 2/3 mi. S Byron
Contra Costa Co., Calif.

April 7

2540 *Sceloporus occidentalis*

(2541)

"

"

collected by Jacob Frenkel

(2542) *Gerrhonotus m.*

"

"

W. F. Wood

2543 *Eumeces*

2544

"

2545

"

2546

"

(2547)

"

collected by Jacob Frenkel

2548 *Pituophis*Kellogg Cr., 300 ft., 4 mi. W and 2 mi. S Byron
Contra Costa Co., Calif.

April 7

2549 *Batrachoseps attenuatus*

(2550)

"

"

coll. by W. F. Wood

(2551)

"

"

"

(2552)

"

"

"

(2553)

"

"

"

(2554)

"

"

"

(2555) *Aneides lugubris*

"

J. Rodgers - 1940

Acc. no. 6187 (cont.)

Kellogg Cr., 300 ft., 4 mi. W and 2 mi. S Byron,Contra Costa Co., Calif.

April 7

- (2556) *Aneides lugubris* coll. by Jacob Frenkel
 (2557) *Rana aurora draytoni* coll. by W. F. Wood
 (2558) " " " "
 (2559) " " " "
 2560 *Sceloporus occidentalis*
 2561 " "
 2562 *Eumeces* coll. by W. F. Wood
 2563 " "

Kellogg Cr., 500 ft., 7 3/4 mi. SW ByronContra Costa Co., Calif.

April 7th

- 2564 *Batrachoseps attenuatus*
 2565 " "
 2566 " "
 2567 " "
 (2568) " " coll. by Jacob Frenkel
 (2569) " " coll. by W. F. Wood
 (2570) " " "
 (2571) " " "
 (2572) " " "
 (2573) " " "
 2574 *Lampropeltis getulus*

Marsh Cr., 210 ft., 5 mi. W. ByronContra Costa Co., Calif.

April 7

- 2575 *Bufo*
 2576 *Gerrhonotus*

J. Rodgers - 1940

Acc. no. 6187 (cont.)Marsh Cr., 210 ft., 5 mi. W ByronContra Costa Co., Calif.

April 7

2577 *Sceloporus occidentalis*2578 *Eumeces*

2579 "

2580 "

2581 "

2582 *Lampropeltis getulus*

(2583)

" "

coll. by Jacob Frenkel

April 8

(2584) *Bufo*

coll. by W. F. Wood

2585 *Hyla regilla*

2586 "

2587 *Rana aurora draytoni*

2588 "

2589 *Pituophis catenifer catenifer*2590 *Thamnophis sirtalis*6 3/4 mi. WSW ByronContra Costa Co., Calif.

April 8, 1940

2591 *Sceloporus occidentalis*2592 *Gerrhonotus m.*2593 *Eumeces*

2594 "

2595 "

Marsh Cr., 500 ft., 4.6 mi. E Mt. DiabloContra Costa Co., Calif.

April 8

2596 *Sceloporus occidentalis*

J. Rodgers - 1940

Acc. no. 6187 (cont.)
Marsh Cr., 500 ft., 4.6 mi. E Mt. Diablo
Contra Costa Co., Calif.

April 8

2597 *Sceloporus occidentalis*(2598) *Eumeces skiltonianus* coll. by Jacob. Frenkel2599 *Ishamnophis ordinoides*Kirker Creek, 450 ft., 2 1/3 mi. NNW NortonvilleContra Costa Co., Calif.

April 14

2600 *Sceloporus occidentalis*

2601 "

largest 2602 *Eumeces*

smallest 2603 "

(2604) "

coll. by John Gray

Kirker Creek, 350 ft., 1 2/3 mi. NNW NortonvilleContra Costa Co., Calif.

April 14

2605 *Sceloporus occidentalis*2606 *Eumeces*5/8 mi. SW Nortonville, 1150 ft.,Contra Costa Co., Calif.

April 14

2607 *Sceloporus occidentalis* coll. by John Gray

2608 "

2609 "

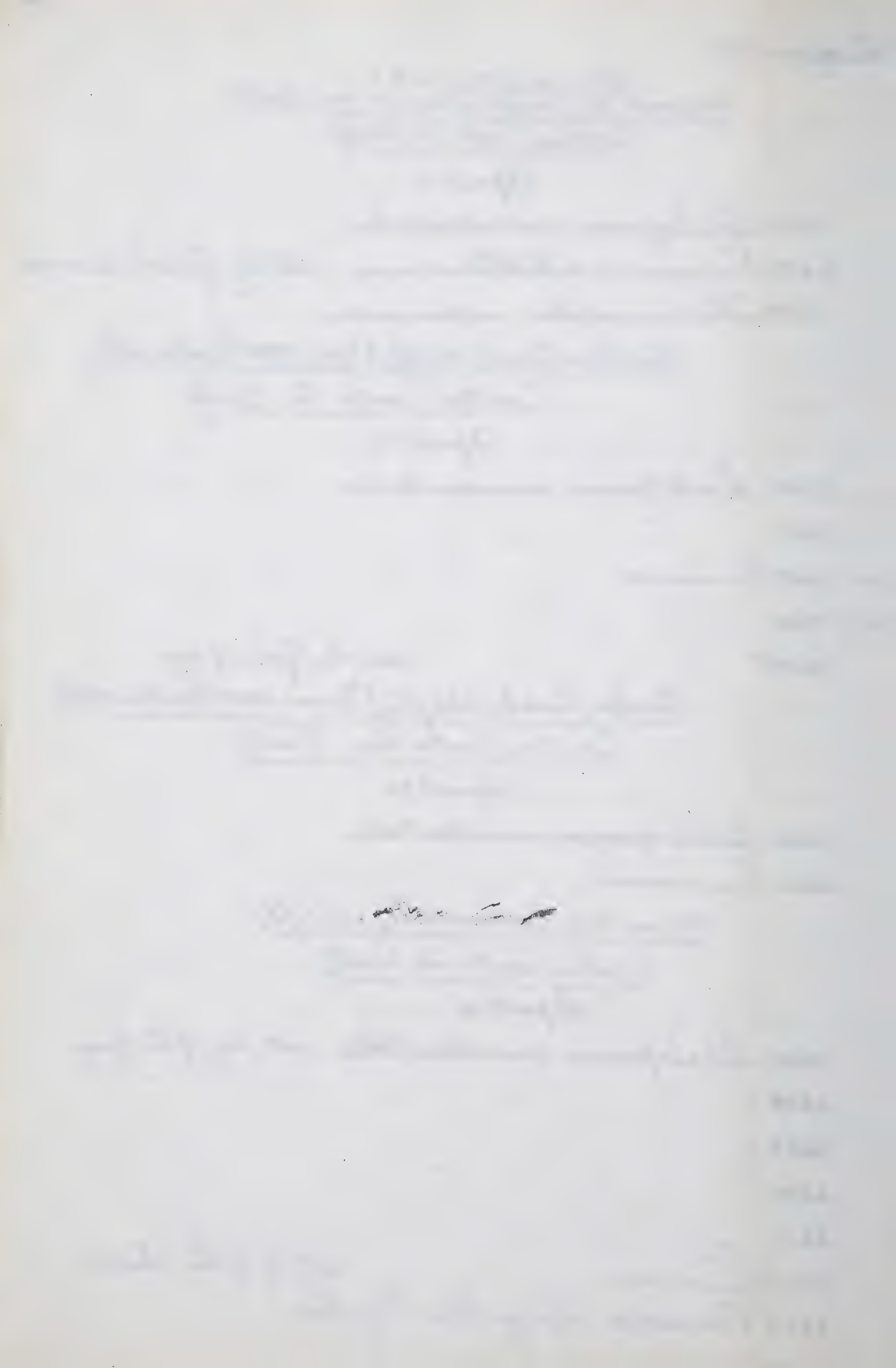
2610 "

2611 "

(2612) *Eumeces*

coll. by John Chatlin

2613 *Aneides lugubris lugubris*~~2614~~



10 mi. NNE Salinas,
Monterey Co., California

April 24, 1940 (acc. no.)

2614 *Aneides lugubris lugubris*

2615 *Sceloporus occidentalis*

2616 " "

2617 " "

2618 " "

2619 " "

East end of Pacheco Pass, 450 ft., 3 1/3 mi. E summit

Merced Co., Calif.

April 24, 1940

2620 *Sceloporus occidentalis*

2621 " "

2622 " "

2623 " "

Gargas Creek, 350 ft., 10 mi. SW Newman,
Stanislaus Co., Calif.

April 24,

2624 *Sceloporus occidentalis*

Acc. no.

Mt. Diablo, Contra Costa Co., Calif.

May 16

2625 *Phrynosoma coronatum frontale*

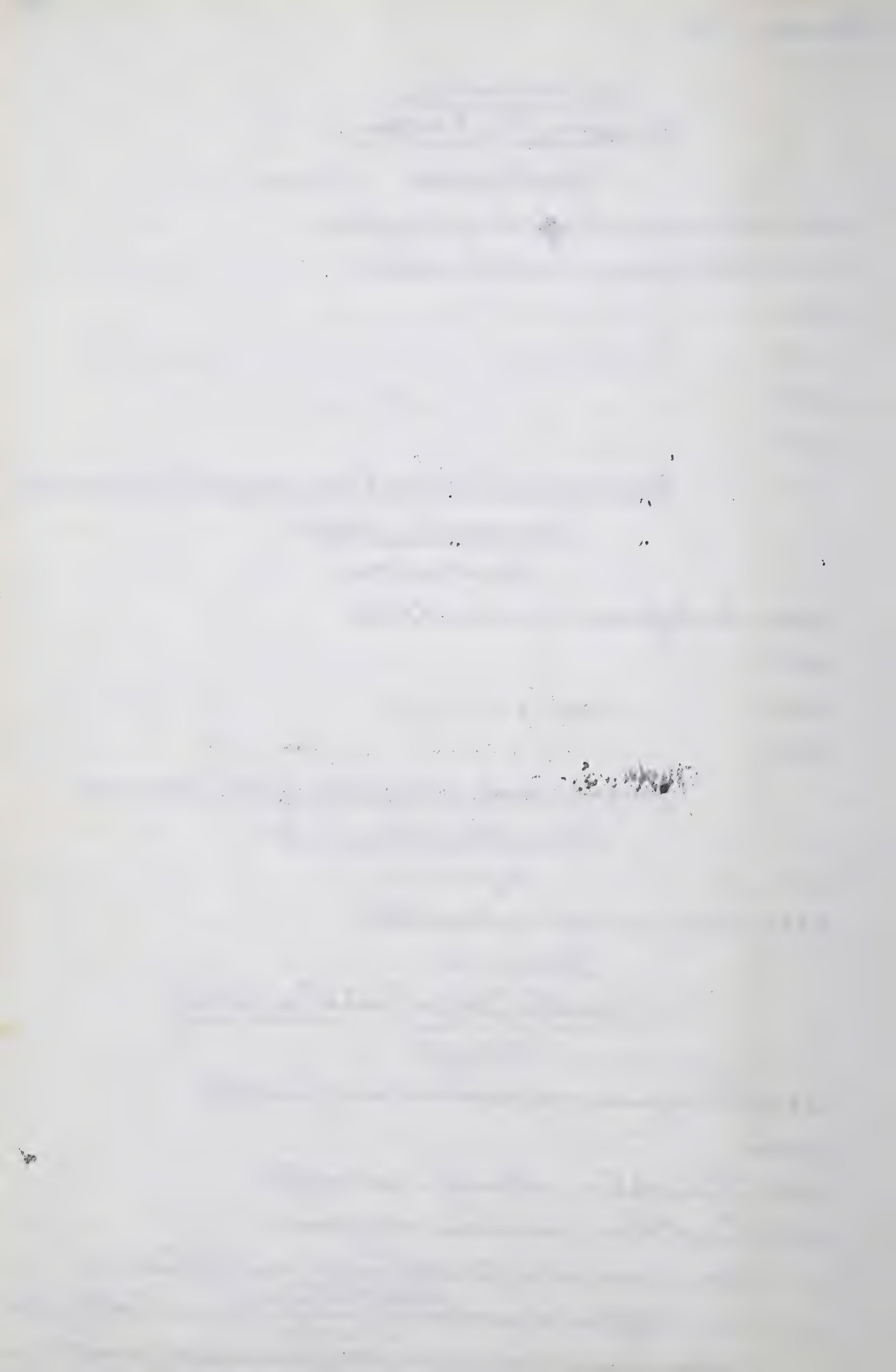
2626 " " "

2627 *Pituophis catenifer catenifer*

2628 *Crotalus viridis oreganus*.

Above 4 spec. coll. by J. W. Mac Swain and J. E. Bohart.

2625 - 3000 ft.; on red gravel among ^{Skeleton Tree.} Yerba Santa; 2626 - Rock City; light
colored ground among manzanita. 2627 - 2500 ft.; 7:30 pm. 2628 - 2700 ft.; on road at 7:35 pm.



Acc. no. 6239

2 mi. N Loma, 1600 ft.

San Bernardino Co., Calif.

May 1940

- 2629 *Sonora occipitalis* collected by W. Saarni
color records by Ridgway from live specimen, see
species notes, p. 1.

San Joaquin Experimental RangeMadera Co., Calif.

May 30, 1940

- 2630 *Cnemidophorus tessellatus*

2631

"

"

2632

"

"

2633

"

"

May 31

- 2634 *Cnemidophorus tessellatus*

Wishon, (so end of Base Lake)Madera Co., Fresno Co., Calif.

Insert p. 168B

June 4

- 2635 *Sceloporus o.*

- 2636 Flycatcher (Western?)

Insert from
p. 168CSan Joaquin Experimental RangeMadera Co., Calif.Insert
from p. 168C

June 5

- 2637 *Uta stansburiana*

- 2638 *Sceloporus o. bi-seriatus* gonads 6 mm in diam. much blue on belly ♂

2639

"

"

"

2640

"

"

"

- 2641 *Cnemidophorus tessellatus* ♂ 9.5 grams 74 + 182 mm.

2642

"

"

♀ 32 grams 105 + 85 + 109 mm.

2643

"

"

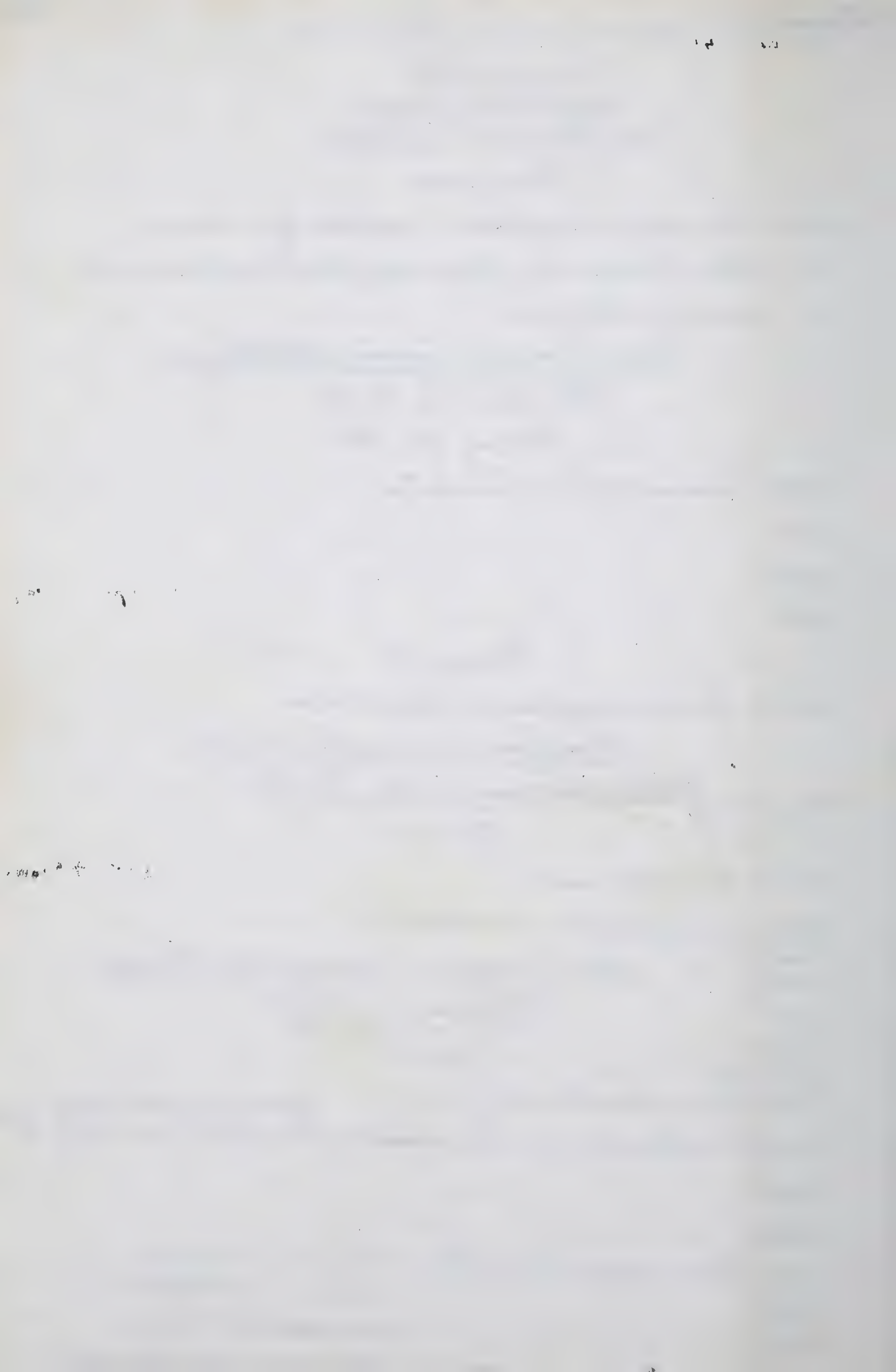
♂ 37 grams 110 + 267 mm.

2644

"

"

♂ 34.7 grams 109 + 192 (incomplete)



Itinerary, etc.

June 1 ^{Madera} Bass Lake, Fresno Co., California

1. Western Wood Pewee 3:45 am
Olive-sided
2. ~~Ash-throated~~ Flycatcher
3. Western Robin
4. Western Chipping Sparrow
5. Blue-fronted Jay
6. Junco
7. Brewer Blackbird
8. Cowbird
9. House Wren
10. Tolmie Warbler
11. Western Flycatcher ?
12. Purple Finch 5:00 am.
13. Black-headed Grosbeak
14. Cassin Vireo 6:10 am.
15. Green-backed Goldfinch 6:55 am.
16. Yellow Warbler
17. Calif. Woodpecker
18. Warbling Vireo
19. Spotted Towhee
20. Anna Hummer

June 2 21. Linnet

22. Flicker

23. Downy Woodpecker

24. Cliff Swallow } at dam

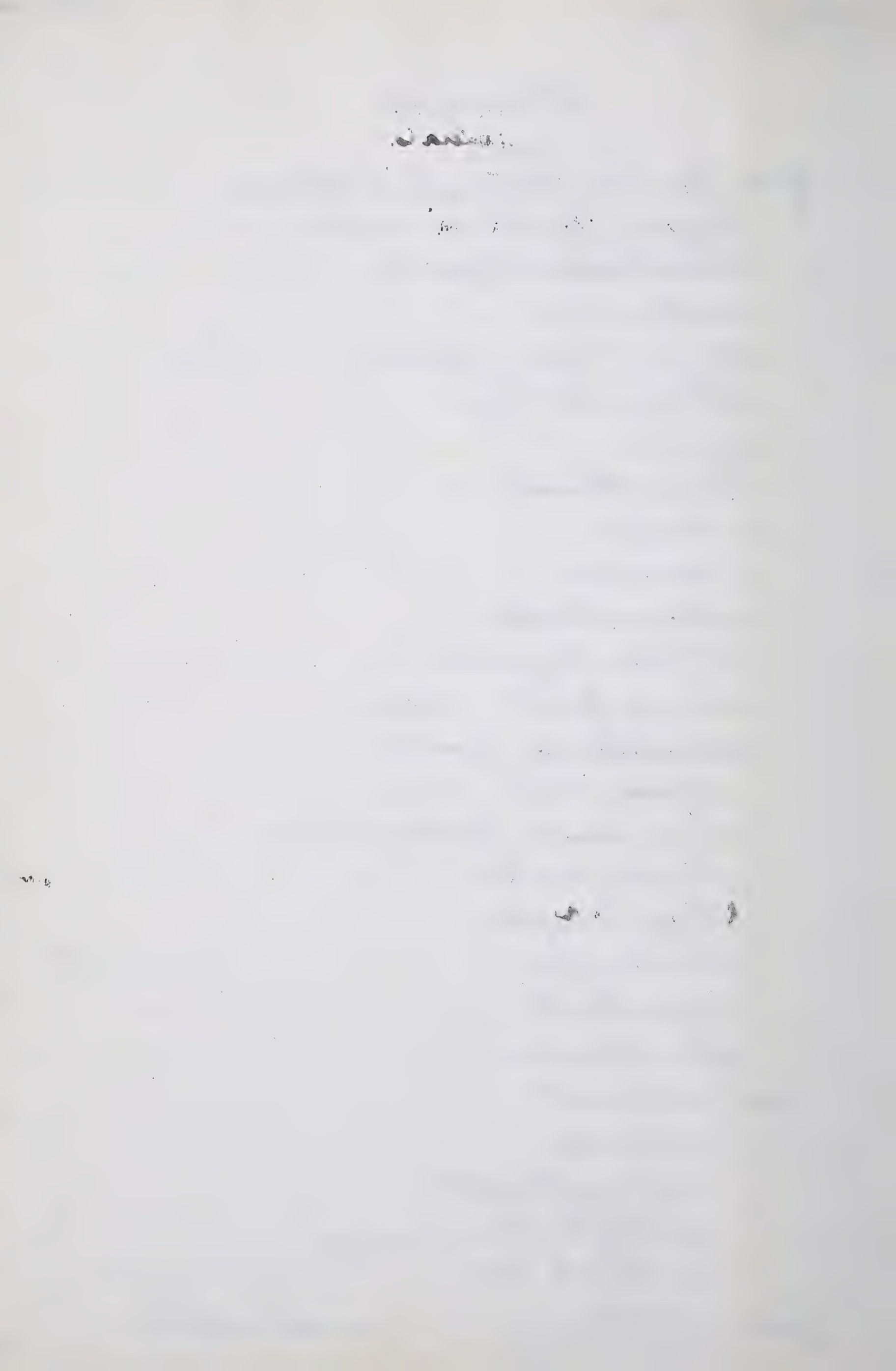
25. Black Tern }

June 3 26. Killdeer

27. Mourning Dove

28. Western Tanager

} at north end of lake



Itinerary, etc.

June 4 Bass Lake, ^{Madera Co.} ~~Fresno Co.~~, California

29 Red-tailed Hawk

30 Red-breasted Nuthatch

31 Lawrence Goldfinch

There are many bullfrogs in the lake. I have heard them in several coves. Have also heard Hyla regilla. I picked up a dead adult skink at the edge of the road in "Cozy Cove" this morning, and saw one run down a burrow under an Arctostaphylos this afternoon. This was in yellow pine, black oak country (some sugar pine). I have also seen Gerrhonotus and Trelopomus here.

June ³² 5 Russet-backed Thrush

San Joaquin Experimental Range, Madera Co., California.

Arrived at the range at 9:30 a.m. See species notes under Cnemidophorus tesselatus and Mourning Dove.

June 8 Bass Lake, Madera Co., California

33 Violet-green Swallow - at "The Falls".

June 18 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

To-day Sherburn Cook, Jr., came in and told me that two or three weeks ago he was in Mohave Desert, and while there he collected a large desert gopher snake. "It was very large and pale," he said. He brought it home and some time since then it has escaped. He is now living somewhere out in the edge of Berkeley, so it seems likely that the snake will survive!

San Joaquin Experimental Range
Madera Co., Calif.

June 6

- 2645 *Sceloporus o. bi-seriatus* 9.5 grams 63 + 98 mm
 2646 " " " 15 grams 75 + 86 (inc.)
 2647 *Cnemidophorus t.* 35 grams 109 + 263 mm.
 2648 " " 32.5 grams 116 + 271 mm.
 2649 " " 25.5 grams 104 + 240 mm. (broken at 57 mm)

2647 and 2648 are extremes* of light and dark.
 2647 is tan with dark brown spots, and 2648 is dark brown with fine lines and spots of tan.
 2649 is intermediate. * of those I have collected here, purely from memory over past few days.

June 7

- 2650 *Sceloporus o. bi-seriatus* probably in dark phase shot at 6:30 a.m.
 2651 " " 17.0 grams, 83 + 83 (neg.)
 2652 " " 18.0 grams, 83 + 121 mm.
 2653 *Uta* 52 + 69 mm.
 2654 *Cnemidophorus tessellatus* 24.5 grams 114 + 110 + 95 mm. ^{tail}
 2655 " " 35. grams. 107 + 245 mm.
 2656 " " unsuccessfully dyed violet June 6.

2651 was laid on light colored grass in direct sunlight for 20 minutes to see if it would take on the light phase after death (It was killed about 8:00 a.m.), but it showed no change that could be detected without better methods of comparison.

Inset from
p. 168C

Wichon (at so. end of Bass Lake)

Madera Co., Calif.

June 10,

- 2657 *Sceloporus o. bi-seriatus* - kept in a bag without food or water until June 18, 1940

Acc. no.
Hopper Creek, 2500 ft., 2 mi. NE Hopper Mt.,
Ventura Co., Calif.
 May 23, 1940

2658 *Rana boylei*

2659 " "

2660 " "

2661 " "

2662 " "

2663 " "

2664 " "

2665 " "

2666 " "

2667 " "

The above specimens (2658-2667) were received from Carl Koford, May 27, 1940. They were shipped alive from Fillmore, Calif. Nos. 2658-2663 were dead when received. They were put into alcohol immediately. Nos. 2664-2667 were put in a terrarium and left until June 19, when they were killed in alcohol. It is noted that the four kept alive for 3 weeks are much darker. The others died while in a lightproof package.

Insect from
 p. 168C

6 mi. E Livermore
Alameda Co., Calif.
 June 24

2668 *Sceloporus o. occidentalis*

2669 " "

2670 " "

2671 " "

2672 " "

2673 " "

1000 1000 1000

Itinerary, etc.

June 26 6 mi. E Livermore, Alameda Co., Calif.

John Chatten and I arrived here at 7:00 am, with picks and shovels, to dig for skinks. We turned over all the loose rocks and picked several tons of rocks out of the ground. All the digging was in the exact place where we have collected skinks on several occasions before. We dug as deep as $2\frac{1}{2}$ feet in some places and $1\frac{1}{2}$ to 2 in many. The ground under^{*} the rocks was very light and soft. A skink could have worked its way thru much of it. (*Under the masses of rocks that we picked out). At about the level of the roots there were more holes than anywhere else. There were cracks down among the rocks. The only holes we saw that were definite burrows, were a few tarantula holes. We found one tarantula and about 10 Stenopelmatus. We collected 6 Sceloporus; they were common. We did not find a skink, nor did we find anything that we judged to be a sign of one.

~~Oct. 12 At about 1:20 pm.~~

J. Rodgers - 1940

171

Acc. no. 6095
Tanganika Terr., Africa
Oct. 1926

~~2674~~
~~2658~~ *Scolecophorus ulugurnensis*
Kenya Province, Africa

2675
~~2659~~ *Dermophis gregorii*

2676

2677

4 specimens

above (2674-2677) procured from A. Loveridge by exchange.
Peccatoni, nr. Witu, Kenya Colony, May 24-26, 1934.

Acc. 6245

2 mi. NW Lame Deer,
Rosebud Co., Montana

June 15, 1940

2678 *Pituophis sayii sayii* - collected by J.R.
Alcorn, Fred Testana & W.C. Russell.

acc no. — not yet accessioned 7/31/40

2679 *Bufo peltaphalus* with following data:
" of Cuba - kept in captivity in Zool. Research
Supply toad yard - killed 6.6.40 by J.L.
Mohr in Berkeley - given to me about
July 4, 1940, soaked in running hot and
cold water for several weeks, dried and
sent to bug room.

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

Sept. 19

Acc. no. 6342

Silden Road, at east edge of Berkeley
in Contra Costa Co., Calif.

Sept. 17, 1940

2680 ♀ *Crotalus viridis* - 659 + 43 + 43 (7 rattles and a button)

collected and brought into museum by John Hunter,
3531 West St., Oakland.

After this snake was chloroformed (about half an hour after chloroform was allowed to evaporate from cotton in a gallon jar, and about 15 minutes after she had quit moving) we noticed that she was full of something, and, whatever it was, it was moving. We cut her open and found six young. One was out of its membranous bag, but still attached by an umbilicus. It was not the most posterior, as it had worked its way forward. They were very much alive. I would cut the membrane open and reach in with forceps to and work them out. Two of them struck at the forceps before they had even started out through the hole I had cut. All were willing to strike immediately, but one was weaker than the rest. Three hours later it had died. Eighteen hours later five were still very much alive. I chloroformed them all, and weighed and measured them. Weights and measurements follow on page 172, under numbers 2682 - 2687.

Itinerary, etc.

Oct. 12, Austin Cr., 80 ft., 1 mi. S Cazadero, Sonoma Co., Calif.

At about 1:20 pm., R. Q. Sturton, Harvey Fisher, Joe Marshall, Jacob Frenkel, and I started on the first field trip of the Grinnell Naturalists Society. We crossed the two bridges (San Francisco Bay Bridge and Golden Gate Bridge) and traveled north to Santa Rosa then to Grunewille, down the Russian River to Austin Creek, and up Austin Creek to the Berkeley City Camp. There we met several other carloads of fellows and by dark between 20 and 25 had arrived. The camp is among large redwoods on the west bank of Austin Creek. There had not been much rain so far, and the ground under everything that we turned over was dry.

Oct. 13 John Davis and I seized the stream and got a quart of fish. We collected Triturus similans and Rana boylei boylei. Along the stream we saw a water ouzel and three wood ducks. Later in the morning we left camp and traveled west along the north bank of the Russian River and looked for tree toads in the Douglas fir trees. All together five or 6 were found. We (my carload) ate lunch at the beach south of the mouth of the Russian River. We traveled south then south east to Petaluma, east then south, past the old adobe fort, across Deep Point road to Valley's, across Carquinez Bridge & home. We collected Rana aurora aurora 3 1/2 mi ENE Petaluma. A porpoise was collected by one group Oct. 12, near Cazadero.

Mus. Vert., Zool., Univ. Calif., Berkeley
Alameda Co., Calif.
Sept. 19

Acc. 6342 (cont.)

26821	♂	<i>Crotalus viridis</i>	wt. 14.3 grams	219+20+5 (button)
			died 3 hours after birth	
26832	♀	"	weight	measurements (mm.)
			14.8 grams.	220+17+5 (button)
26843	♂	"	17.1	221+18.5+5
26854	♀	"	16.9	219+18.5+5.5
26865	♀	"	16.6	217+16.5+5.5
26876	♀	"	15.7	210+16.5+5.5

acc — not accessioned

Yellowtail Point, 1300±ft., Redwood Peak

Contra Costa Co., Calif.

Sept. 14, 1940

2688 *Diadophis amabilis* 254+46 mm.

Collected and brought in by Harry Adamson.

Acc 6288

Gift of F.B. Johnson, P.O. Box 482, Pasadena, Calif.

Cocos Islands

off coast of Costa Rica

July 24, 1940

2689 Lizard

2690 "

2691 "

2692 "

Insert from
p. 173B

Austin Creek, 80 ft., 1 mi. S Cazadero

Sonoma Co., Calif.

Oct. 13, 1940

2693 *Triturus similans* skeleton

2694 " " "

2695 " " "

(Acc. 6368)

Austin Creek, 80 ft, 1 mi. S Cazadero
Sonoma Co., Calif.
 Oct 13, 1940

2696 *Triturus similans*

2697

2698 *Rana boylei boylei*

2699

2700

2701

2702

2703

2704

5 1/2 mi. east by north Petaluma

Labels on specimens
 read, "3 1/2 mi. ESE
 Petaluma".

Sonoma Co., Calif.

Oct. 13, 1940

Slightly less than 1 1/2 mi NW Eureka
 School, in ravine on north side of
 road at the first curve in the highway
 that leads NW from the school house.

2705 *Rana aurora draytonii* one of the biggest I have ever seen
 & certainly the biggest I have collected

2706

collected by R.A. Storton

2707

Insert p. 174B

Mus. Vert. Zool., Univ. Calif., Berkeley

Acc. no. 6370

West side of Honey Lake, 14 mi. SE Susanville

Lassen Co., Calif.

875 + 67 + 30 mm.

2708 *Arotalus viridis lutosus* - col. & given to MVZ by { C.E.(Ed) Rice,
 Mus. Vert. Zool., Univ. Calif., Berkeley } 3224 Foothill Blvd.
 Oakland, Calif.

Acc. no. 6382

West slope Woolsey Canyon, Berkeley

Alameda Co., Calif.

Oct. 30, 1940

2709 *Diadophis amabilis* - see species notes, Oct. 31.

Brought in by Mrs. H. W. Grinnell and
 Bernice Fegel.

Wt. 1.62 grams

152 + 29 mm measured dead

161 + 29 mm. measured alive.

Itinerary etc.

- Oct. 24 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Oct. 9, I saw pipits at the edge of the bay, Oct 20, 21, I heard notes overhead on the campus. I have been examining the lawns daily so as to be sure to record the first pipits feeding there. Yesterday there were none, last night it rained (the first time in several weeks), this morning there were pipits on the lawn west of the west entrance.
- Oct. 28 2019 Vine St., Berkeley, Alameda Co., Calif.

Mus. Vert. Zool., Univ. Calif., Berkeley
Alameda Co., Calif.
 Nov. 8

Highway #93, near Darby,
Ravalli Co., Montana

July 27, 1940

2710 *Pituophis sayii* } col. by W. R. Jellison
 2711 " " }

These two specimens are property of W. R. Jellison but are given my numbers because he did not give them any other numbers and so that I will have numbers to refer to on my data sheets.

Mus. Vert. Zool., Univ. Calif., Berkeley
 Nov. 11

Three live Sceloporus (from this end of this county) on hand at present are given the following numbers

2712 4th toe on rt. hind foot cut off; ♂ ^{In captivity for at least 6 mo. possibly infected by protozoa by Jacob Frankel}
 2713 forked tail ; ♂ In captivity since last May; good condition
 2714 4th toe on left hind foot cut off; ♀ Brought in from Strawberry Canyon 10 days ago.

Mus. Vert. Zool., Univ. Calif., Berkeley
 Nov. 15

Okanagan Valley (?). B.C.

Three specimens of *Aneides* sent to M.V.Z. for identification by Dr. McTaggart Cowan.

2715 *Aneides*

2716 "

2717 "

No. 2715 is to be dissected and the remains cleared and stained.

Mrs. Vert. Zool., Univ. Calif., Berkeley
Alameda Co., Calif.

Nov. 22

Two male Sceloporus occidentalis, collected in Santa Clara Valley were brought in to me by George Mansfield, Nov. 16. I marked them by clipping of the 4th toe of the right front foot ^{gone} and the 4th toe of the left front foot of the other. (see spec. notes, p. 3)

2718 Sceloporus occidentalis 4 RF

2719 " " 4 LF
Mrs. Vert. Zool., Univ. Calif., Berkeley
 Nov. 26

Colony of Zoological Research Supply

Englewood, Florida (originally from Cuba)

Killed at Berkeley, Nov. 22, 1940

2720 Bufo peltacephalus to be bugged for skeleton

2721 " " "

2722 " " "

Bought for study of parasites, killed & given to MVZ by John Mohr

Mrs. Vert., Zool., Univ. Calif., Berkeley

Alameda Co., Calif.

Dec. 4

2723 Eumeces gilberti - described on this date in spec. notes

Strawberry Canyon, U.C. Campus, Berkeley,

Alameda Co., Calif.

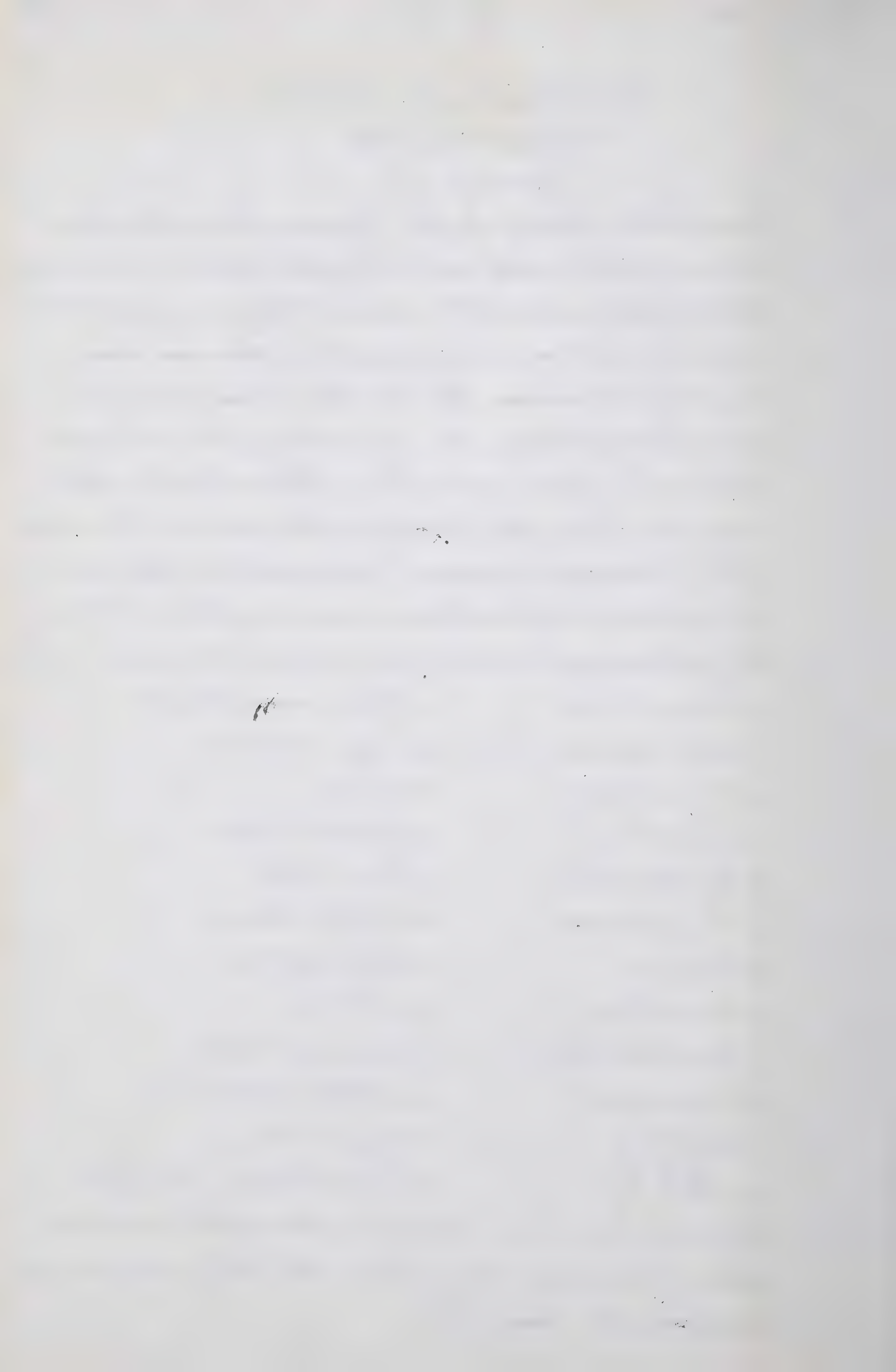
Strawberry Canyon, Berkeley,
Alameda Co., Calif

Jan. 10

Janet Failla, Eugene Eagle, Goddard Silverstein, and I arrived at the north east side of the stadium at 6:40 am. Street lights were still on and the sky was just lighted up enough that we could see that there were many breaks in the clouds. The roosters were crowing at the poultry station. We walked up the road, and heard our first native bird, a Brown Towhee, about 100 yards east of the poultry station at 6:50. We walked to the botanical gardens, around them then and back down to the stadium, arriving there at 8:23. The following is a list of species seen or heard during the walk.

- | | |
|--------------------------|--------------------------|
| 1. Brown Towhee | 13. Ruby-crowned Kinglet |
| 2. White-crowned Sparrow | 14. Sparrow Hawk |
| 3. Horned Owl | 15. Robin |
| 4. Varied Thrush | 16. Black Phoebe |
| 5. Spotted Towhee | 17. Pine Siskin |
| 6. Song Sparrow | 18. Calif. Thrasher |
| 7. Wren-tit | 19. Bewick Wren |
| 8. Hermit Thrush | 20. Flicker |
| 9. Red-tailed Hawk | 21. Audubon Warbler |
| 10. Cooper Hawk ? | 22. Western Winter Wren |
| 11. Calif. Jay | 23. Bush-tit |
| 12. Steller Jay | 24. Plain Titmouse |
| | 25. Gull |

We saw and heard at least 15 Varied Thrushes, more than I have seen since 1928 when they were common in the Santa Clara Valley.



note: these
numbers were
used again,
pp. 182-183

Congress Springs
Santa Clara Co., Calif.

Feb. 1

Wallace Wood, Mr. J. B. Slevin and Woods 4½ year old boy left San Francisco at about 7:50 am. for a collecting trip to the Santa Cruz Mts. It was raining hard at 6:00 am and has rained very little as we drove down. We saw many Varied Thrushes along the road from Woodside to Searsville Lake. We must have seen about 200.

2724 *Triturus torosus*

2725 *Batrachoseps attenuatus*

2726 " "

2727 " "

2728 " "

2729 " "

2730 " "

2731 " "

2732 *Aneides l. lugubris*

2733 " *flavipunctatus*

2734 " "

2735 " "

2736 " "

2737 " "

2738 " "

2739 " "

2740 " "

2741 " "

2742 " "

2743 " "

note: these
numbers were
used again,
pp. 183-188

Congress Springs
Santa Clara Co., Calif.
Feb. 1

- 2744 *Aneides flavipunctatus*
2745 " "
2746 " "
2747 " "
2748 " "

6 mi. SW. Saratoga
in Santa Cruz County, Calif.
Feb. 1

- 2749 *Ensatina eschscholtzi* collected by J. R. Stevin

1 1/2 mi. W. Felton
Santa Cruz County, Calif.
Feb. 1

- 2750 *Batrachoseps attenuatus*
2751 " "
2752 " "
2753 " "
2754 " "

- 2755 *Aneides flavipunctatus*

- 2756 " "
2757 " "
2758 " "
2759 " "
2760 " "
2761 " "
2762 " "
2763 " "
2764 " "

(Skeleton)



note: these
numbers
were used
again,
pp. 188-190

1 1/2 mi. W. Felton
Santa Cruz County, Calif.
Feb. 1

2765 *Aneides flavipunctatus*

2766 " "

2767 " "

2768 " "

2769 *Ensatina hescholtzi*

2770 " " "

2771 " " "

2772 " " "

2773 " " "

2774 " " "

2775 " " "

2776 " " "

2777 *Gerrhonotus c. coeruleus*

2778 " " "

2779 *Cnemidophorus s. skiltonianus*

1/2 mi. NW Santa Cruz
Santa Cruz Co., Calif.
Feb. 1

2780 *Iriturus torosus*

2781 *Batrachoseps a. attenuatus*

2782 " " "

2783 *Hyla regilla*

2784 " "

2785 " "

2786 " "

2787 " "

2788 *Sceloporus o.*

1/2 mi. NW Santa Cruz,
Santa Cruz Co., Calif.

Feb. 1

2789 *Gerrhonotus m. multi-carinatus*

2 mi. NW Santa Cruz,
Santa Cruz Co., Calif.

Feb. 2

2790 *Triturus torosus*

2791 " "

2792 " "

2793 *Hyla regilla*

The 4 specimens listed above (2790-2793) were collected about 1/2 mi N of the reservoir, while hiking around the country with my brother and sister (Donald & Dorothy), Gilbert Burn, Louise and George Shriene. It was a beautiful clear morning and there was a light cool breeze.

note: these
numbers used
before, on p. 178

Dillon Beach
Marin Co., Calif.

June 1-20, 1941

See species note under Bufo boreas halophilus

- | | | |
|------|--|---|
| 2724 | <i>Rana boylei boylei</i> | } died in captivity
saved for
skeltons |
| 2725 | <i>Gerrhonotus caeruleus caeruleus</i> | |
| 2726 | " " " | |
| 2727 | " " " | Injected with 95 and
preserved in 75% alcohol. |

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 22

Acc. no. 6596

1212 Grizzely Peak Blvd., Berkeley
Alameda Co., Calif.

July # 16

- 2728 *Charina bottae bottae* 506 + 65 mm.

Brought in by Mr. A. Sargin, who says he found it crawling on the front step of his home at the above locality. Killed with chloroform, injected with 95% and preserved in 75% alcohol.

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 25

Acc. no. 6451

See correspondence, H. E. Stork, Feb. 8, 1941

Pass Tempisque, Rio Tempisque,

Guanacaste, Costa Rica

Aug. 5-12, 1932

- 2729 1 dry skin of large iguana lizard
2730 1 " " snake

Both these skins were soaked up and "tanned" in alcohol and glycerine.

note: these
numbers used
before on
pp. 178-179

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
July 25

Acc. 6451 (cont.)

Sara (Maore de Dias), Lemon,
East coast Costa Rica

July 17-19, 1932

- 2731 crested lizard
2732 " "
2733 *Cnemidophorus*
2734 "
2735 "
2736 "
2737 small xantusia-like lizard
2738 dark snake
2739 cross-banded snake
2740 small amphibian

San Isidro de El General,
Costa Rica

July 3, 1932

- 2741 large brown-banded snake
2742 small " " "
2743 snake

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 28

Acc. no 6607

University of Alaska
College, Alaska

Summer, 1940

- 2744 *Rana sylvatica cantabrigensis* - Sent to me by J. W. Gasser - collected at the Univ. by one of the boys' collecting. H. G. Doty, 1940

note: these
numbers used
before on
p. 179

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 28

Acc. no. 6531

7.5 mi. E Santa Margarita

San Luis Obispo Co., Calif.

Spring, 1941

2745 *Anniella*

San Luis Obispo

San Luis Obispo Co., Calif.

Spring, 1941

2746 *Eumeces*

6 mi. E ~~San Luis Co~~ Santa Margarita

San Luis Obispo Co., Calif.

Spring, 1941

2747 *Eumeces*

4 mi. W. La Panga

San Luis Obispo Co., Calif.

Spring, 1941

2748 *Eumeces*

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 30

These two specimens of *Pelamys platurus*
were lost from an accession, but I cannot trace
them back to any one with certainty.

Off Coiba Is., opposite Gulf of Montijo,
off Pacific Coast of Panama

Dec. 30, 1934

2749

Pelamys platurus

2750

note: these
numbers used
before on
p. 179

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif
Aug 7

Acc. no. 6615 (more on p. 185B)

5 lizards acquired by exchange from Univ. Mich. Mus. Zool.
Dept. Santa Cruz, Bolivia

Nov. 1926

2751 *Polychone liogaster* UMMZ No. 68078
Buenavista, Dept. Santa Cruz, Bolivia

~~2752~~ ~~Leu~~ Sept. 1923

2752 *Leiorhynchus canaliculatus* UMMZ 60594
Tirague, Dept. Cochabamba, Bolivia

April 1927

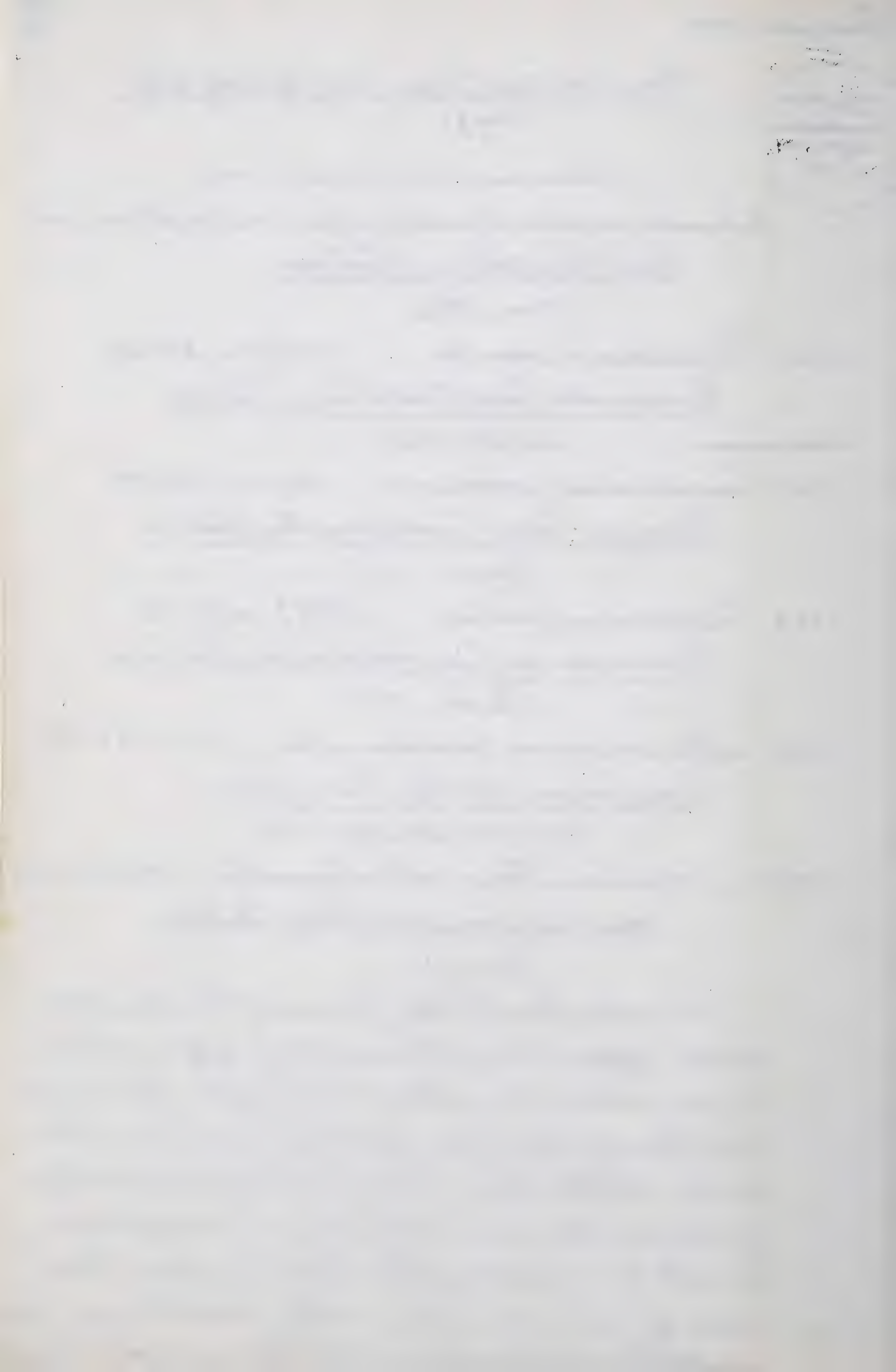
2753 *Liolaemus pictus* UMMZ 68143
Yungas de Cochabamba, Bolivia
Oct. 1927

2754 *Stenocercus roseiventris* UMMZ 68132
Arabupu, 4200 ft., Venezuela
Nov. 29 - Dec. 24, 1938

2755 *Tropidurus torquatus torquatus* UMMZ 8523
Mus. Vert. Zool., Univ. Calif., Berkeley

Aug 11

Ten members of the Grinnell Naturalists Society spent the afternoon of Aug 7 on Point Reyes, where they observed Pigeon Guillemots, California Murres, California Sea Lions and Steller Sea Lions. Only about a dozen Guillemots were seen. Most were going in or out of a cave in the cliff but some were seen swimming on the water and diving under, propelling themselves with their wings. The



Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
Nov. 6

Acc. no. 6615 (cont.)

Original labels, sent with specimens received from Univ. Mich. Mus. Zool. on exchange.

Polychrus liogaster | T.R. 2751
U.M.M.Z. No. 68078
Dept. Sta. Cruz, Bolivia
Collector J. Steinbach
Nov. 1926

Lioccephalus caudatus | T.R. 2752
U.M.M.Z. No. 60594
Buenavista, Dept. Sta. Cruz, Bolivia
Coll. José Steinbach Sept. 1923

Liolaemus pictus | T.R. 2753
U.M.M.Z. No. 68143
Tiraque, Dept. Cochabamba,
Bolivia
Collector F.B. Steinbach April 1927

^{2754 T.R.}
Stenocercus roseiventris
U.M.M.Z. No. 68132
Yungas de Cochabamba, Bolivia
Collector F.B. Steinbach Oct. 1927

Tropidurus t. torquatus | T.R. 2755
U.M.M.Z. No. 85231
Arabyu, 4200 feet, Venezuela
coll. A.L. Pinkus
Nov. 29 - Dec. 24, 1938

Note: these
numbers were
used before
on p. 179

Mus. Vert. Zool., Univ. Calif., Berkeley
Aug. 11

Murres were numerous, about 300 and were feeding young. Some of the young were probably not more than two or three days old. There were about 50 or 75 sea lions on and around the rocks, about $\frac{1}{3}$ being California Sea lions. The party camped just back from the edge of the beach about 5 miles north of Point Reyes. About noon on Aug 10, the party started back to Berkeley (via Burlingame - Frank Watson) by various routes. Those on the trip were Seth Benson, Don Hoffmeister, Ed V. Miller, Ruston Hendrickson, Frank Peabody, R.E. Shilton, Tom Rodgers, Frank Watson, Charles Reed, and Charles Benton. The following three specimens were collected on the trip.

5 mi. north Point Reyes
Marin Co., Calif.

27608 - Sealion Skull Aug 9

2756 *Rana aurora draytonii* - col. by Seth Benson

W. side Tomales Bay, $\frac{3}{4}$ mi. ESE Inverness

Marin Co., Calif.
Aug 10

2757 *Hyla regilla*

E. side Bolinas Bay

Marin Co., Calif.

Aug 10

2758 *Sceloporus occidentalis*

This young Sceloporus has blue on both sides of belly, and blue on throat that is in two large well-united patches.

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF LINCOLN'S INN

IN TWO VOLUMES

LONDON

1699

Note: these
numbers
were used
before,
pp. 179 + 86

Mus. Vert. Zool., Univ. Calif., Berkeley
Aug 11 (cont.)

Acc. no. 6616

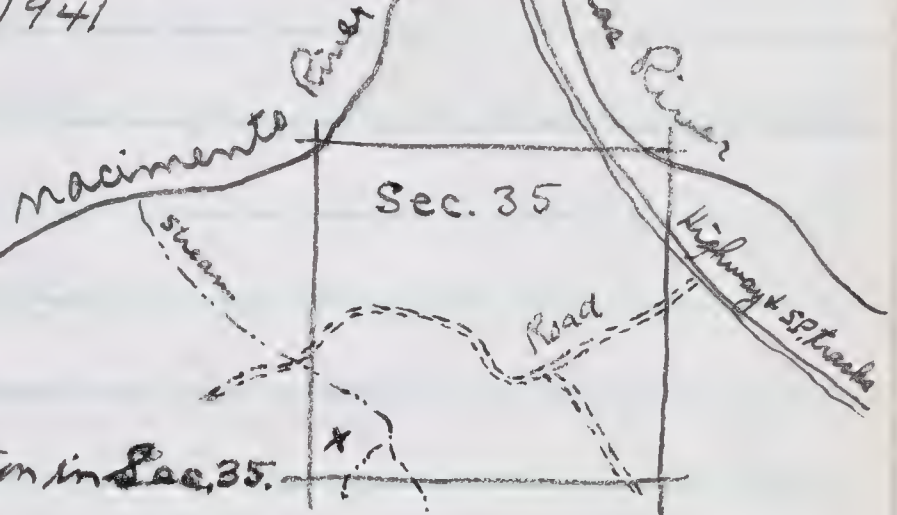
5 1/4 mi. SSE Bradley, 650 ft. (Sec. 35, T24S, R11E)

Monterey Co., Calif.

Aug. 5, 1941

- 2759 *Anniella pulchra*
found two
feet underground
by Reid MacDonald.

x, marks spot of collection in Sec. 35.



- 2760 - see p. +82 186

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug 14

Acc. no 6621

2761 *Bald Mt., 7834 ft.*

Fresno Co., Calif.

June 14, 1941

- 2761 *Hydromantes platycephalus* - col. by Lowell Adams

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug. 24

Acc. no. 6632

14 mi. N. Independence

Inyo Co., Calif.

- 2762 ♀ *Sauromalus obesus*

- 2763 ♂ *Sceloporus magister*

These two lizards were collected
Aug (July? - see acc. card + correspondence) 18, and
sent in alive. They were killed and
skinned Aug. 22, 1941.

note: these
numbers were
used before,
pp. 179-180

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug. 24

Acc. 6634

Tracy

San Joaquin Co., Calif.

April 24, 1938

- 2764 *Tyto alba* ^{wt. 18.3 grams} - hatched May 8, killed immediately
2765 " ^{wt. 18.0 grams} " " 12 " "

Coral Hollow

San Joaquin Co., Calif.

April 24, 1938

- 2766 *Falco mexicanus* ^{wt. 27.1 grams} } Taken from pipped eggs after
2767 " ^{wt. 27.6 grams} } nest was ~~at~~ covered by
2768 " ^{wt. 29.1 grams} } cave-in of bank - resulting
2769 " ^{wt. 29.8 grams} } from rain - by Harvey D. Fisher

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug. 27

Acc. 6636

1/2 mi. W Julian

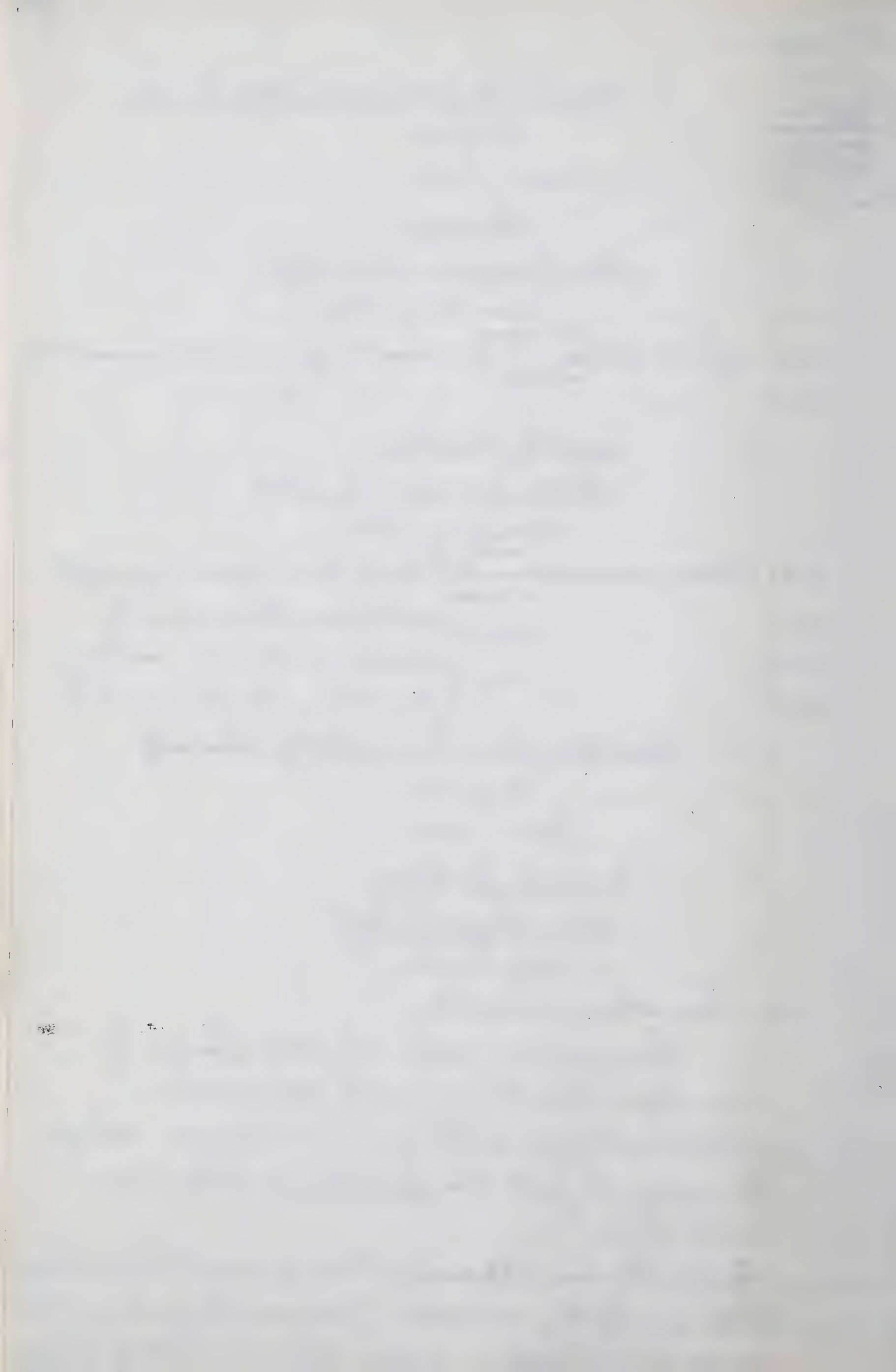
San Diego Co., Calif.

Aug. 18, 1941

- 2770 *Ensatina croceator*

Brought in alive by W.H. Lange of
112 Agri. Hall - a grad student in
entomology, who is working on slugs.
He says he got this Ensatina out of an
oak log.

Spots between Capucine Orange and Michaux Orange,
Pl. III, 13, C, lighter, almost to Capucine Buff at ventral
ends of blotches on sides. Back, black, blending



Mus. Vert. Zool., Univ. Calif., Berkeley
Aug. 27

Acc. 6636 (cont.)

gradually to a color darker than Chestnut-Brown (Pl. XIV, 11, l). Belly Inaker Drab (Pl. LI, 1¹¹¹¹¹), ventral side of ~~belly~~ tail lighter, near light Inaker Drab. As I stroked the salamander on the back it secreted a slime that, spread over by the stroking, made the surface glossy. On the tail, the secretion was much more rapid, and formed in droplets of milky (slightly) substance.

This specimen was loaned to Frank Peabody for recording of its trackway. It escaped in his basement and was found dead and drying in a dusty corner. He put it into some full strength (95%?) denatured alcohol & brought it in to me. It was badly shriveled. It was then put in water for 6 hrs., 50% alcohol (1.5 pts) to glycerine (1 pt.) for 10 hrs and then into 65% alcohol for storage. It expanded back about to normal, but looks rather rough.

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept. 10

Acc. 6645

4 mi. NW Inverness, 180 ft.

Marin Co., Calif.

Sept. 7, 1941

Note: this number was used before, p. 180

2771 *Thamnophis o. atratus* - skeleton

note: nos 2772,
2773, 2774, were
used before,
p. 180

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept 10

Acc. 6645 (cont.)

7 mi. ESE Mt. Diablo

Contra Costa Co., Calif.

Aug 31, 1941

2772 *Gerrhonotus m. multi-carinatus* . skeleton

12 mi. SW Fernley

Lyon Co., Nevada

May 30, 1941

2773 *Coluber flagellum* killed Sept. after shedding, Sept 9,
see species accounts

Acc. 6646

10 mi. N Susanville

Lassen Co., Calif.

Aug. 30, 1941

2774 *Coluber constrictor mormon*

Note Nos. 2724 to 2774 (pp. 178-181) are
repeated on pp. 182 to 190.

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept. 17

Acc. 6652

The following specimens were collected in
Waddell Creek at Stephens Camp (Aunt May Creek)
and on up the canyon as far as Buckelberry Flat
or Hulda Creek. The elevation ranged from 75 to
125 ft. All the *Dicamptodon* were collected
in (larvae) or near Aunt May Creek (at Stephens Camp).
Only one *Aneides flavipunctatus* was collected

Mus. Vert. Zool., Univ. Calif., Berkeley
Sept. 17

Acc. 6652 (cont.)

here, almost all the others were found under debris in the black boggy areas just about 300 yds up the West Fork. All the Aneides lugubris were found in rotten logs. The Ensatina Batrachoseps ^{two} at and all the Triturus (except one) were found in, under the bark of, or under logs or debris. One large Triturus (A.M. 3950) and one small one were in water; the large one in the creek and the small one in a pool at the black bog. The Rana aurora ^{at least two of the three} ~~possibly not all~~ were found in a pond at the black bog, and all the Rana boylei were found in the creek. The Sceloporus and the skink were found under and on scattered lumber, timber and debris around the abandoned sawmill at (between) the forks; ^{most of} all the Gerrhonotus were taken here also, but one was taken at Stephens Camp and one was taken at Slide Creek (about $\frac{3}{4}$ mile up the West Fork)

Wadell Creek, 100 ft.

Santa Cruz County, Calif.

Sept. 14, 1941

Note: due to a
 misup in pages, nos
 2724-2774 were dup-
 licated, and 2793 is now to be
 found on page 181.

2794 Triturus torosus

2795

"

"

2796

"

"

2797

"

"

2798 Ensatina e. eschscholtzii

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept. 17

Acc. 6652 (cont.)

- 2799 *Ensatina e. eschscholtzii*
 2800 *Batrachoseps a. attenuatus*
 2801 " " "
 2802 *Aneides flavipunctatus*
 2803 " "
 2804 " "
 2805 " "
 2806 " "
 2807 " "
 2808 " *lugubris*
 2809 " "
 2810 " " col. by S. F. Cook, Jr.
 2811 " " " "
 2812 " " " "
 2813 *Rana aurora draytonii* (skeleton) ♂
 2814 " " "
 2815 " *b. boylii* (skeleton)
 2816 " " " "
 2817 " " "
 2818 *Hyla regilla* (skeleton)
 2819 " "
 2820 *Sceloporus o. occidentalis* (skeleton)
 2821 ♂ " " "
 2822 ♂ " " "
 2823 ♀ " " "
 2824 ♀ " " "
 2825 " " "

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept. 17

Acc. 6652

Waddell Creek, 100 ft.,Santa Cruz Co., Calif

Sept. 14, 1941

2826 *Sceloporus occidentalis*

2827

2828 *Gerrhonotus c. coeruleus* (skeleton) ^{see} species notes2829 *Gerrhonotus c. coeruleus*

2830

Mus. Vert. Zool., Univ. Calif., Berkeley

Sept. 29, 1941

Toads sent in by W. L. Jellison; from Highway 81,
Cass Co., N. Dakota, Aug 15, 1941

Toads Also Are Just Traveling

Next time your auto skids over a layer of toads on the road, don't lose your temper because, like yourself, they're out traveling.

That is the explanation Dr. A. D. Whedon, NDAC zoologist, gives for the prevalence of toads in recent weeks. | | |

In note, Jellison states,
"Some roads in
eastern North
Dakota are
covered with
these toads...."

2831 *Bufo cognatus*
6 specimens, all 2831

Motorists traveling the highway to the Minnesota lake region have encountered great numbers of the animals and the paving has been strewn with dead toads as a result. On country roads, too, and in a lesser degree in Fargo, the situation has been noticeable.

"There really is no explanation for their prevalence except that they're migrating," Professor Whedon says. "Toads, like frogs, have moist skins and cannot travel except when moisture is present. That is why they seem to increase so much after rains.

"After a shower, toads almost always are present. That has given rise to the erroneous expression of 'raining toads.'"

Many Fargo-Moorhead residents have complained about toads in their yards. Dr. Whedon says some have even appropriated low-lying bird baths at his home.

The toads will not cause warts if touched, he said. This widespread belief has arisen because the skin of a toad exudes a protective poison. Dogs and cats often become sick from picking up toads in their mouths.

One question Dr. Whedon won't attempt to answer—he doesn't know where the toads are going on their travels.

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
Nov. 6

Acc. 6699

2 miles north of El Segundo
Los Angeles Co., Calif.
Sept. 1, 1941

2832 *Anniella pulchra* see species account MVZ 36473

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
Nov. 11

Acc. 6700

11 mi. N Albuquerque
Sandoval Co., New Mexico
Oct. 21, 1941

2833 *Arizona elegans* 220+37 mm. see spec. account. MVZ 36474

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
Jan. 19

Acc. 6747

Northwestern outskirts of Stockton
San Joaquin Co., Calif.
Dec. 1941

2834 *Eumeces*

see species notes *E. g. gilberti*

This specimen was collected by a student of Dr. Jack Arnold, while they were on a field trip along the south leve of the bypass (?) just north of the Western Pacific Station (about $\frac{1}{3}$ mile north of the College of the Pacific campus). It was found under a slab of old side walk, on the north-facing slope of the leve. The specimen was kept in a terrarium in the lab. (College of Pacific) and given to me ^{alive} Jan. 18 by Arnold.

Quote from a letter from John R. Arnold, Feb. 11, 1942:
"... was collected on the [south] bank of the Calaveras River approximately 200 yards west of the crossing on Pacific Avenue and the Calaveras River. This is due north of the College of the Pacific campus and is approximately 25 yards north of the railroad track... found under old sidewalk paving which had been thrown on the bank."

(W. Fork)

Waddell Creek, 1/2 mile below forks to 1/2 mile aboveAcc. 6773Santa Cruz Co., Calif.

Feb. 14.

Dr. and Mrs. A. H. Wright ~~arrived~~ at and I arrived at J. J. Hoover's house on Rancho del Oso, at 11:00 a.m. We found that Hoover had gotten a late start to Santa Cruz that morning and would not be back before noon. Also, the other car of the party (Paul Maslin, George Myers, Anita Dougherty, and Sherburne Cook, Jr.) had not yet arrived. We went back down to the west gate, parked the car and spent about 30 min. looking for amphibians in the black muskeg area around and below a spring just inside of the gate. ^(Dr. Wright found 1 Nyla) The other car arrived and we went up the canyon to Stephens Camp. We spent an hour or so collecting around the camp and up the small creek behind the camp, ate lunch then hiked up to about 1/2 mile above the forks, collecting all the way up and back.

2835 *Ensatina e. eschscholtzii*

2836 " " "

2837 *Batrachoseps a. attenuatus*

2838 " " "

2839 " " "

2840 " " "

2841 " " "

2842 *Aneides l. longicollis flavipunctatus*

2843 " " "

2844 *Triturus granulatus*

2845 " " "

2846 " " "

Waddell Cr., 1/2 mi. below forks 1/2 mi. above
Santa Cruz Co., Calif.
 Feb. 14

2847 *Triturus granulatus*

2848 "

2849 "

2850 "

2851 "

2852 "

2853 "

2854 "

2855 "

2856 *Hyla regilla*

San Joaquin Co., Calif.
 Feb. 22

Walter Dalquest and I left Berkeley by Greyhound Bus at 7:10 am. (Pacific War Time), met Phil Merritt in Lafayette and continued east in his car. We were driving into the rising sun clear to the valley - the sky was clear and the atmosphere slightly hazy. There was frost in Berkeley when we left. We found a freshly killed gopher snake in the road 3 mi. ^{NN}W Byron, Contra Costa Co. The only other snake found was taken from deep under a rock, 5 mi. S Brentwood. We saw 4 or 5 pairs of Spanish Hawks foraging near the road between Brentwood Byron and Stockton. We were impressed by the beauty of the soft gray males with black tipped wings & white rump. We saw mountain bluebirds about 7 mi. ^ESE Stockton. Collection localities and specimens taken at them follow.

3 mi. NNW Byron
Contra Costa Co., Calif.
 Acc. 6776
 2857-2945
 Feb. 22

2857 *Pituophis catenifer* DOR 1133+156 (broken)

Marsh Creek, 4 1/2 mi. ESE Clayton

Contra Costa Co., Calif.

Feb. 22

2858 *Aneides l. lugubris*

2859 " " "

2860 " " "

2861 " " "

2862 *Hyla regilla*

2863 *Sceloporus o. occidentalis*

2864 " " "

5 mi. S Brentwood
Contra Costa Co., Calif.

Feb. 22

2865 *Aneides l. lugubris*

2866 " " "

2867 " " "

2868 *Uta stansburiana*

2869 *Sceloporus o. occidentalis*

2870 " " "

2871 " " "

2872 " " "

2873 " " "

2874 " " "

2875 *Geranostus m. multi-carinatus*

2876 *Coluber flagellum* 493+177 mm

North side Mokelumne River, 1 1/2 mi. E Woodbridge,
San Joaquin Co., Calif.

Acc. 6776 (cont.)

Feb. 22

2877	<i>Hyla regilla</i>
2878	" "
2957	<i>Genhonotus m. multi-carinatus</i>
2958	" " "
2959	" " "
2879	<i>Sceloporus occidentalis</i>
2880	" "
2881	" "
2882	" "
2883	" "
2884	" "
2885	" "
2886	" "
2887	" "
2888	" "
2889	" "
2890	" "
2891	" "
2892	" "
2893	" "
2894	" "
2895	" "
2896	" "
2897	" "
2898	" "
2899	" "
2900	" "

North side Mokelumne River, 1 1/2 mi. E WoodbridgeSan Joaquin Co., Calif.

Feb. 22

2901 *Sceloporus occidentalis*

2902 " "

2903 " "

2904 " "

2905 " "

2906 " "

2907 " "

2908 " "

2909 " "

2910 " "

2911 " "

2912 " "

2913 " "

1 mi. E ClementsSan Joaquin Co., Calif.

Feb. 22

2914 *Nyctola regilla*

2915 " "

2916 " "

2917 *Gerrhonotus m. multi-parinatus*

2918 " "

2919 *Eumeces*

2920 " "

2921 *Sceloporus occidentalis*

2922 " "

2923 " "

2924 " "

spn } notes copied into
 notebook from notes
 on scratch paper,
April 29

1 mi. E Clemente
San Joaquin Co., Calif.

Feb. 22

2925 *Sceloporus occidentalis*

2926 "

2927 "

2928 "

2929 "

2930 "

2931 "

2932 "

2933 "

2934 "

2935 "

2936 "

2937 "

1 mi. N Lodi

San Joaquin Co. Calif.

2938 *Sceloporus occidentalis*

2939A *Gerrhonotus m. multi-varinatus*

2939B "

2940 *Eumeces*

2941 "

2942 "

2943 "

2944 "

2945 "

} species notes copied
 into notebook from
 note in jar with
 specimens,
April 29

Acc. 6777-6795 (2946)

7 mi. ESE Stockton on Collegedale Road

San Joaquin Co., Calif.

Feb., 1942

2946 *Eumeces*

Acc. 6774 (2947)Alpine Lake, Fairfax
Marin Co., Calif.

Feb. 16, 1942

2947 *Crotalus v.*

This snake was brought in by a Sargent and a corporal of the Medical Corps. It was collected by a Capt Reeves of Company A (not the Med. Corps).

Acc. 6777 (2948-2949)Cherry and Walnut Springs, W. fork of Cibola River,
Bexar Co., Texas

Jan 17, 1942

2948 *Eurycea neotenes*

Collected by Mr. and Mrs. Quillen and Dr. and Mrs. Wright

Head of Rio Comal River, San Marcos,
Hays Co., Texas - Jan 13, 19422949 *Eurycea nana*

Collected by Dr. C. S. Amot and Dr. & Mrs. Wright.

Described by S. C. Bishop - Acc. Pap.

Mus. Mich. No. 451 (p. 64)

1/2 mi S Grizzly Peak
Alameda Co., Calif.2950 *Ensatina eschscholtzii* Feb. 28, 1943

2951 "

2952 *Sceloporus occidentalis*2953 *Uta stansburiana*

2954 "

2955 "

2956 "

} all except the largest
Ensatina, collected
by Walt Balquist

2957, 2958, 2959 (see p. 199, after 2978)

Grizzly Peak
Alameda Co., Calif.

Feb. 28

Yesterday afternoon Walt Dalquest, Bob Storer and I set 150 traps (50 each) within 200 yards of Grizzly Peak Blvd., about 600 yards SSW of the lookout tower on the peak. They were all set in the sagebrush; Walt and Bob on a west-facing slope and mine on a south-facing slope - on the sides of the little draw below the big rocks. Mine were all within 200 feet of the edge of the sage brush; mostly within 50 feet of it. Walt and Bob ran their lines up about 100 yards into the sagebrush. I caught 8 Microtus, and 1 shrew (Sorex ~~ca~~ ornatus), Walt caught ~~5~~ 2 Microtus, 1 Paregnathus californicus & 1 Wren-tit, Bob caught 4 Microtus and 1 Peromyscus. Walt took 6 of my Microtus and the shrew. At about 7:45, when the sun was just hitting Berkeley, we could see a small daridgable cruising north along the coast just west of the Santa Cruz mountains, and at that time we saw five or six large planes (probably patrol bombers) and two smaller faster ships take off from the Navy base at Alameda and head out to the west and northwest. The morning was bright and the sky clear, but a haze hung ^{low} over the bay just east of San Francisco and a fog bank ^{low} hung off shore, just concealing the Farallon Islands.



Itinerary

Sacramento Valley trip, Mar. 6, 7, 8, 9.
(Written Mar. 10, in Berkeley)

Walter Dalquest, Sherburne Cook, Jr., and I left Berkeley at 5:30 a.m., in the Reo truck belonging to MVZ. We picked up Phillip Merritt at his home in Lafayette.

At Dry Creek, 6 mi. N Lodi, we collected all our specimens under planks, boards, chunks of wood and large timbers along the road that leads into a farm on the west side of highway 99 and the north side of Dry Creek (not now dry). The ground under the objects was porous and damp -- obviously had not been flooded. The land is at least 12 feet above the bottom of the creek.

At Arno, we collected along the R.R. track from the R.R. sign "Arno," to about 1/2 mi. S. We rolled over granite boulders that were placed along the fill on which the R.R. was built. The country was flooded on both sides of the tracks and conditions under all except a few of the highest rocks were certainly indicative of recent flooding. No skinks were found; only Sceloporus and one Coluber constrictor.

Most of the specimens taken at the place called "1 mi. W Michigan Bar" were taken on the hillside on the north side of the Cosumnes River, just across a bridge from a place called Bridge House. Some were taken about 1/2 mile west of there on both sides of the road.

"10 mi. WSW Plymouth" specimens were taken on a south-facing hillside north of the road (highway 16).

As we traveled NE from Wheatland, we found rocks to turn over but did not find skinks until we

THE HISTORY OF THE
REIGN OF KING CHARLES THE FIRST

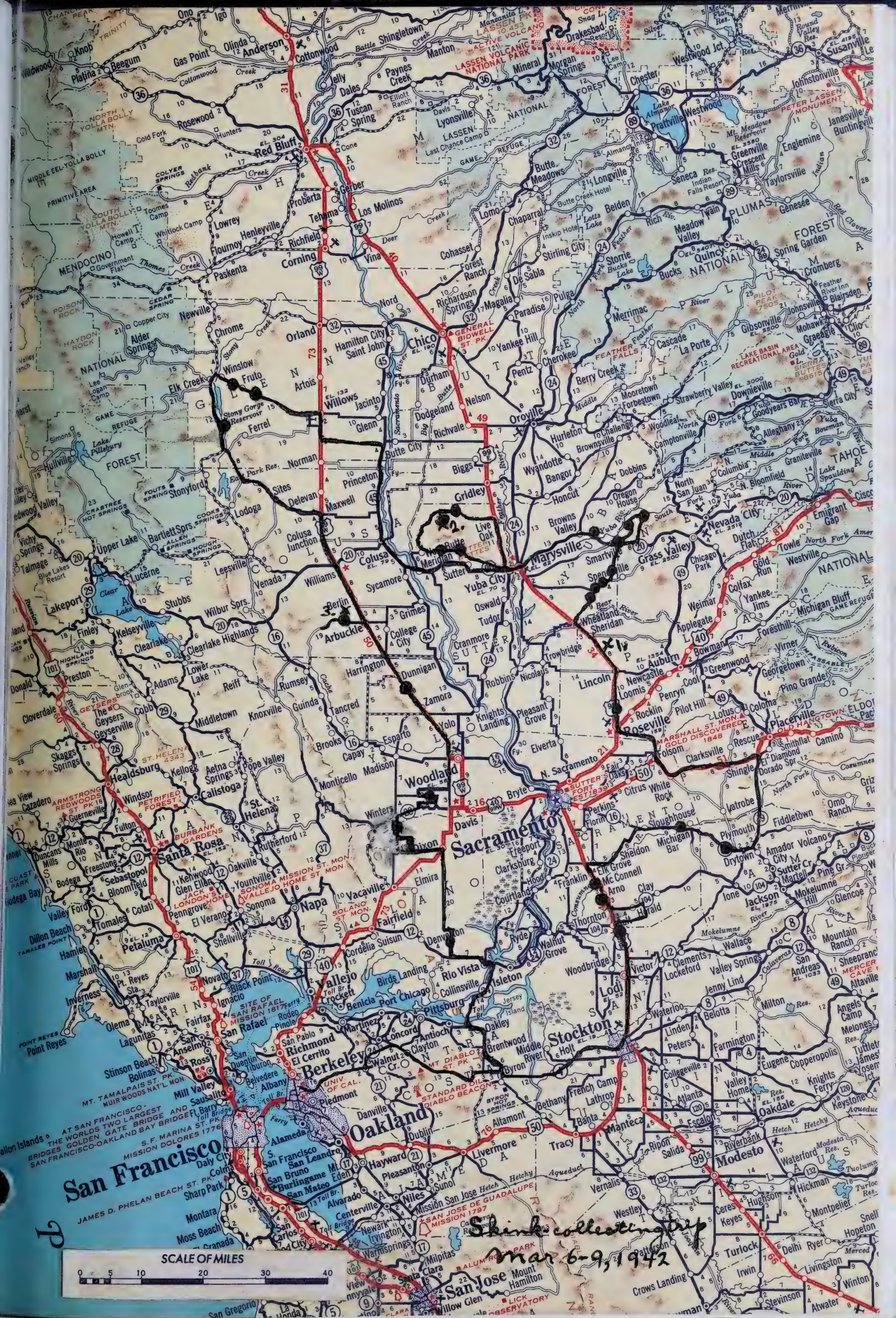
IN WHICH ARE CONTAINED
THE MOST IMPORTANT AND INTERESTING
PARTS OF HIS REIGN
FROM HIS MARRIAGE TO HIS DEATH

BY
JOHN BURNET
OF THE UNIVERSITY OF OXFORD
IN TWO VOLUMES
THE FIRST

IN WHICH ARE CONTAINED
THE MOST IMPORTANT AND INTERESTING
PARTS OF HIS REIGN
FROM HIS MARRIAGE TO HIS DEATH

IN TWO VOLUMES
THE SECOND

IN WHICH ARE CONTAINED
THE MOST IMPORTANT AND INTERESTING
PARTS OF HIS REIGN
FROM HIS MARRIAGE TO HIS DEATH



SCALE OF MILES

Shink collecting trip
Mar 6-9, 1942



STANDARD STATIONS ROAD MAP

STANDARD STATIONS ROAD MAP

Alturas	586
Bakersfield	137
Barstow	214
Bishop	215
Blythe	346
Chico	256
Crescent City	371
Dunsmuir	508
El Centro	654
Eugene, Ore.	791
Eureka	499
Fresno	636
Grants Pass, Ore.	325
King City	239
Long Beach	796
Los Angeles	933
Marysville	14
Merced	568
Modesto	705
Mojave	107
Monterey	878
Napa	640
Needles	777
Oakland	951
Oroville	2
Pasadena	165
Placerville	134
Portland, Ore.	112
Red Bluff	146
Redding	203
Reno, Nev.	505
Riverside	324
Sacramento	163
Salinas	461
San Bernardino	300
San Diego	635
San Francisco	47
San Jose	199
San Luis Obispo	336
San Marcos	68
San Mateo	69
San Rafael	510
San Ramon	172
San Simeon	251
San Ysidro	439
Seaside	722
Shasta	292
Shasta Dam	155
Shasta Lake	615
Shasta-Trinity	288
Shasta County	493
Shasta National Forest	283
Shasta National Monument	420
Shasta National Park	220
Shasta National Recreation Area	663
Shasta National Wildlife Refuge	173
Shasta National Wildflower Area	946
Shasta National Wild Horse Area	8
Shasta National Wild Sheep Area	115
Shasta National Wild Turkey Area	127
Shasta National Wildfowl Area	198
Shasta National Wildfowl Refuge	431
Shasta National Wildfowl Sanctuary	605
Shasta National Wildfowl Sanctuary	112
Shasta National Wildfowl Sanctuary	397
Shasta National Wildfowl Sanctuary	682
Shasta National Wildfowl Sanctuary	342
Shasta National Wildfowl Sanctuary	456
Shasta National Wildfowl Sanctuary	81
Shasta National Wildfowl Sanctuary	191
Shasta National Wildfowl Sanctuary	301
Shasta National Wildfowl Sanctuary	160
Shasta National Wildfowl Sanctuary	332
Shasta National Wildfowl Sanctuary	382
Shasta National Wildfowl Sanctuary	297
Shasta National Wildfowl Sanctuary	742
Shasta National Wildfowl Sanctuary	281
Shasta National Wildfowl Sanctuary	160

Itinerary

Sacramento Valley trip, Mar. 6, 7, 8, 9.

were 9 mi. out the road, elev. 300 feet, we had not yet reached the blue oaks. At 12 mi. NE, we were in blue-oak country.

Northeast of Smartsville, we stopped several places and found many rocks to turn over, but found no skinks, very few Sceloporus and noted very few centipedes, millipedes and other invertebrates that had been so common in places where skinks were found. The ground was a red soil that had formed by weathering of the basalt rocks. Although the country is high and well drained, conditions under most of the rocks were as barren as if the country had been flooded. At 5 mi. SW Bridgeport, in such country as this, a skink was collected by Sherburne Cook. It was found about 1 foot under the ground, under a rock.

At 4 mi. SSW French Corral the soil is lighter and not red. The two skinks collected there (one by Dalquest and one by Rodgers) were found under rocks that had been piled about two deep near the base of a fence.

On the north side of the Yuba River, we collected on a hillside about 200 yds. NW of the bridge on highway 20. In about 40 minutes, 4 of us together had about 10 skinks. These were obviously skiltonianus since some were heavy-headed obviously mature individuals, yet much smaller than mature gilberti, and with sharply defined color pattern and blue tail. They were more active than gilberti found earlier in the day and on the day before.

On the north side of Marysville Buttes, we camped about 1/2 mile up the canyon from the ranch

Itinerary

Sacramento Valley trip, Mar. 6, 7, 8, 9.

house, on the J. C. Myer ranch. The east-facing slope there is strewn with blue oaks and boulders. The ground under them was moist and porous. About 17 skinks, all skiltonianus, were collected there. We also found skinks under rocks on the south side of Marysville Buttes.

As we got into the hills west of Fruto, we found shale and sandstone outcrops neither of which produced enough talus to convince us that collecting was worth while. We stopped at several sandstone ledges and turned over what talus there was, but with no success. Finally, at a point 9 mi. S Elk Creek we met with success. Merritt had left us at Marysville after collecting on the Buttes, and Dalquest, Cook, and I were alone. We stopped to investigate a sandstone ledge. Dalquest and I were starting to leave when Cook pulled a piece out of the ledge and found a skink. We got a pick and pulled more pieces out of the ledge, finding 3 more. Dalquest and I each found 1 and Cook found 2.

We drove straight through from there to Arbuckle, where we made camp at the edge of the wide gravelly wash of Sand Creek, 5 miles west of the town. As we made camp, many birds were going to roost in the trees around. In the morning we identified most of them as Lark Sparrows. Horned Owls hooted all night. We collected Hyla regilla and one Rana boylei in some small pools near camp.

On the morning of the ninth, we drove west about 6 miles looking for a place to collect skinks but the only outcrops were shale that produced such

Itinerary

Sacramento Valley trip, Mar. 6, 7, 8, 9.

fine talus that it would not furnish cover for skinks. We turned west again, and at Arbuckle, we turned south to search the floor of the valley for skinks. We spent the rest of the day looking under lumber and debris around abandoned and occupied ranch yards. We found an abundance of apparently suitable habitat, all the associated animals, well-drained porous soil, but no skinks. We feel fairly safe in assuming that skiltonianus has not extended its range onto the floor of the valley in the southern part of the western side of the Sacramento Valley.

We crossed the Sacramento River at Rio Vista, the San Joaquin River at the Antioch Bridge, drove southeast through Brentwood and up Marsh Creek. We made a stop 5 mi. SE Clayton, where Dalquest collected a Diadophis and a Lampropeltis and Cook collected a Pituophis. We arrived in Berkeley about 7:00 p.m.

Catalog of specimens collected on the trip, except about 10 or 15 collected at the first 3 localities by Cook, and about 5 collected at several localities by Dalquest, follows on pp. 204-216.

Dry Creek, 50 feet, 6 mi. N Lodi
San Joaquin Co., Calif.

March 6 (itinerary pp. 203A-D)

2960	<i>Batrachoseps a. attenuatus</i>	
2961	" "	
2962	<i>Hyla regilla</i>	
2963	" "	
2964	" "	
2965	" "	
2966	" "	
2967	<i>Bufo boreas halophilus</i>	
2968	<i>Sceloporus o.</i>	
2969	" "	
2970	<i>Eumeces</i>	
2971	<i>Pituophis</i>	Phil Merritt collector
2972	<i>Thamnophis</i>	" " "
2973	"	" " "
2974	"	" " "
2975	"	" " "
2976	"	Walter Dalquest
2977	"	" "
2978	"	" "
2979	"	

Arno [5 1/2 mi. NNW Galt]
Sacramento Co., Calif.

Mar. 6 (itinerary pp. 203A-D)

2980	<i>Sceloporus o.</i>	Phillip Merritt collector
2981	" "	" " "
2982	" "	" " "
2983	" "	" " "

Arno [5 1/2 mi. NNW Galt]
Sacramento Co., Calif.

Mar. 6 (itinerary pp 203A-D)

- 2984 *Sceloporus o.* Walter Dalquest collector
 2985 " " " "
 2986 " " " "
 2987 " " Phillip Merritt "
 2988 " " " "
 2989 " " " "
 2990 " " " "
 2991 " " " "
 2992 *Coluber constrictor mormon*

1 mi. w Michigan Bar, 200 feet
Sacramento Co., Calif.

Mar. 6 (itinerary pp. 203A-D)

- 2993 *Sceloporus o.*
 2994 " "
 2995A " "
 2995B, 2995C, 2995D " "
 2996 *Eumeces* W Dalquest collector
 2997A *Eumeces*
 2997B " "
 2998 *Rampropeltis g. boylii* 353+46 mm
 2999 *Batrachoseps a. attenuatus* W. Dalquest, collector
 3000 " " " " "
 3001 " " " " "
 3002 " " " " "
 3003 " " " " "
 3004 " " " " "

10 mi. WSW Plymouth
Amador Co., Calif.

Mar 6 (itinerary 203A-D)

3005 *Eumeces* Phillip Merritt, collector

3006 " " "

3007 " " "

3008 " " "

3009 " S.F. Cook, Jr. "

3010 " " "

3011 " " "

3012 " " "

3013 " " "

3014 " " "

3015A
 3015B, 3015C, 3015D *Eumeces*

277+88 mm.

3016 *Coluber c. mormon* S.F. Cook, Jr. collector

3017 " " " eaten by large *Lampropeltis g. boylii* in capt.

3018 *Pituophis*

Pleasant Grove Creek, 110 feet, 3 3/4 mi. NNW Roseville,
Placer County, Calif.

Mar 6 (itinerary 203A-D)

3019 *Sceloporus o.* P. Merritt collector

3020 " " S.F. Cook, Jr. "

3021 *Thamnophis* P. Merritt collector 641+143 mm.

6 1/2 mi. NE Wheatland, 200 feet,

Yuba Co., Calif.

Mar 7 (itinerary, pp. 203A-D)

3022 *Batrachoseps a.*

3023 " "

3024 " "

3025 " "

6 1/2 mi. NE Wheatland, 200 feet
Yuba Co., Calif.

Mar. 7 (itinerary pp. 203A-D)

3026	<i>Batrachoseps</i>	a	P. Meritt, Collector
3027	"	"	"
3028	"	"	"
3029	"	"	"
3030	"	"	
3031	"	"	
3032	"	"	
3033	"	"	
3034	"	"	
3035	<i>Phamphis</i>		

8 mi. NE Wheatland, 300 feet,
Yuba Co., Calif.

Mar 7 (itinerary pp. 203A-D)

3036	<i>Sceloporus</i>	a.	S. F. Cook, Jr.
------	-------------------	----	-----------------

9 mi. NE Wheatland, 300 feet,
Yuba Co., Calif.

Mar 7 (itinerary pp. 203A-D)

3037	<i>Sceloporus</i>	a.	P. Meritt, collector
3038	"	"	"
3039	"	"	"
3040	"	"	"
3041	"	"	"
3042	"	"	
3043	"	"	
3044	"	"	
3045	"	"	
3046	"	"	

^N
9 mi. E Wheatland, 300 feet,
Yuba Co., Calif.
March 7

Mar. 7 (itinerary, pp. 203A-D)

3047 *Sceloporus o.*

3048 " "

3049 " "

3050 " "

3051 " "

3052 " "

3053 " "

3054 " "

3055 " "

3056 " "

3057 " "

S. F. Cook, Jr., collector

3058 " "

3059 " "

3060 " "

3061 *Eumeces*

3062 *Hyla regilla*

3063 " "

3064 " "

12 mi. NE Wheatland, 500 feet.

Yuba Co., Calif.

Mar. 7 (itinerary 203A-D)

3065 *Sceloporus o.*

3066 *Eumeces*

3067 "

Smartsville, Yuba Co., Calif.

Mar. 7 (itinerary 203A-D)

3068A *Thamnophis*

S. F. Cook, Jr.



5 mi. SW Bridgeport, 1000 feet,
Nevada Co., Calif.

Mar. 7 (itinerary pp. 203A-D)

3068B *Hyla regilla*

3069 *Sceloporus* o.

P. Merritt, collector

3070

3071

3072A

3072B *Eumeces*

S. F. Cook, Jr.

4 mi. SSW French Corral

{ called 5 mi. SW, in
 Balquest's notes and
 on his labels

Nevada Co., Calif.

~~Insert 2 specimens
 3141, 3142, from p. 212~~

Mar. 7 (itinerary pp. 203A-D)

3073 *Sceloporus* o.

P. Merritt, collector

3074

3075

3076

3077

3078

3079 *Eumeces*

3080 *Thamnophis*

died & spoiled

S. F. Cook, Jr. collector

3081 *Bufo boreas*

3082 *Hyla regilla*

north side Yuba River, 300 feet, 3 mi. NW Smartsville, Yuba Co., Calif.

Mar 7 (itinerary pp. 203A-D)

3083 *Sceloporus* o.

3084

3085 *Eumeces*

S. F. Cook, Jr. collector

3086

P. Merritt collector

3087

3088

3089

north side Yuba River, 300 feet, 3 mi. NW Smartsville, ~~Yuba~~
Yuba Co., California

Mar. 7 (itinerary pp. 203A-D)

3090 *Eumeces*

3091 "

3092 "

3093 *Batrachoseps a* }
 3094 " " } died and spoiled
 3095 " " }

3 mi. ESE Pennington, 100 feet,

Sutter Co., Calif.

Mar. 7 (itinerary pp. 203A-D)

3096 *Sceloporus o.*

S. F. Cook, Jr., collector

J. C. Myers Ranch, 450 feet, 2 mi. NW North Butte [peak],
Sutter Co., Calif.

Mar. 7-8 (itinerary pp. 203A-D)

3097 *Batrachoseps attenuatus* Mar. 8 W.W. Dalquest

3098 " " " "

3099 *Sceloporus o.* S. F. Cook, Jr. collector

3100 " " " "

3101 " " " "

3102 " " " "

3103 " " P. Merritt "

3104 " " " "

3105 " " " "

3106 " " " "

3107 " " " "

3108 " " " "

3109 " " " "

3110 " " " "



J. C. Myers Ranch, 450 feet, 2 mi. NW North Butte [peak],
Sutter Co., Calif.

Mar 7-8 (itinerary pp. 203 A-D)

3111	<i>Sceloporus o.</i>		
3112	" "		
3113	" "		
3114	" "		
3115	" "		
3116	<i>Gerrhonotus m.</i>	S. F. Cook, Jr.	collector
3117	" "	"	"
3118	" "	"	"
3119	" "	"	"
3120	" "	"	"
3121	" "	P. Merritt	"
3122	" "		
3123	" "		
3124	<i>Eumeces skiltonianus</i>	S. F. Cook, Jr.	collector
3125	" "	"	"
3126	" "	"	"
3127	" "	"	"
3128	" "	"	"
3129	" "	P. Merritt,	"
3130	" "	"	"
3131	" "	"	"
3132	" "	"	"
3133	" "	"	"
3134	" "		
3135	" "		
3136	" "		
3137	" "		

J. Rodgers - 1942

J.C. Myers Ranch, 450 feet, 2 mi. NW North Butte [peak],
Sutter Co., Calif.

Mar. 7-8 (itinerary pp. 203 A-D)

- 3138 *Eumeces skiltonianus*
- 3139 " "
- 3140 " " specimen lost

~~Insertion
p. 209~~
~~4 mi. SSW French Corral~~
~~Nevada Co., Calif.~~
~~Mar 7~~

- ~~3141 *Bufo boreas*~~
- ~~3142 *Hyla regilla*~~

1 1/3 mi. S South Butte [peak], 350 feet,
Sutter Co., Calif.

Mar. 8 (itinerary, pp. 203 A-D)

- 3143 *Hyla regilla*
- 3144 *Sceloporus o* S. F. Cook, Jr. collector
- 3145 " " " "
- 3146 " " " "
- 3147 " " " "

~~2 mi SE South Butte [peak], 400 feet,~~
~~Sutter Co., Calif.~~
~~Mar 8~~

- 3148 *Hyla regilla*
- 3149 " " S. F. Cook, Jr. collector
- 3150 *Sceloporus o* P. Merritt, collector
- 3151 " " " "
- 3152 " " " "
- 3153 " " " "
- 3154 " " " "
- 3155 " " " "

J. Rodgers-1942

1 1/3 mi. S South Butte [peak], 350 feet
Sutter Co., Calif

Mar. 8 (itinerary pp 203 A-D)

3156 *Sceloporus o.*

3157 " "

3158 " "

3159 " "

3160 *Eumeces skiltonianus*

2 mi. SE South Butte [peak], 400 feet,
Sutter Co., Calif.

Mar. 8 (itinerary pp 203 A-D)

3161 *Sceloporus o.* S. F. Cook, Jr. collector

3162 " " " "

3163 " " " "

3164 " " " "

3165 " " " "

3166 " " B. Merritt "

3167 " " " "

3168 " " " "

3169 " " " "

3170 " " " "

3171 " " " "

3172 " " " "

3173 " " " "

3174 " " " "

3175 " " " "

3176 " " " "

3177 " " " "

3178 " " " "

3179 " " " "

2 mi. SE South Butte [peak], 400 feet,
Sutter Co., Calif.

Mar. 8 (itinerary pp. 203 A-D)

3180 *Sceloporus o.*

3181 *Eumeces skiltonianus*

P. Meritt, collector

3182

5 mi. ESE Fruto

Glenn Co., Calif.

Mar. 8

3183 *Sceloporus o.*

S. F. Cook, Jr. collector

1 mi. W Fruto

Glenn Co., Calif.

Mar. 8

3184 *Sceloporus o.*

S. F. Cook, Jr. collector

9 mi. S Elk Creek,

Glenn Co., Calif.

Mar. 8

3185 *Eumeces skiltonianus*

S. F. Cook, Jr. collector

3186

"

"

"

"

3187

"

"

W. W. Dalquest "

3188

"

"

Sand Creek, 340 feet, 5 mi. W Arbuckle

Colusa Co., Calif.

Mar. 8

3189 *Hyla regilla*

3190

"

"

3191

"

"

3192

"

"

3193

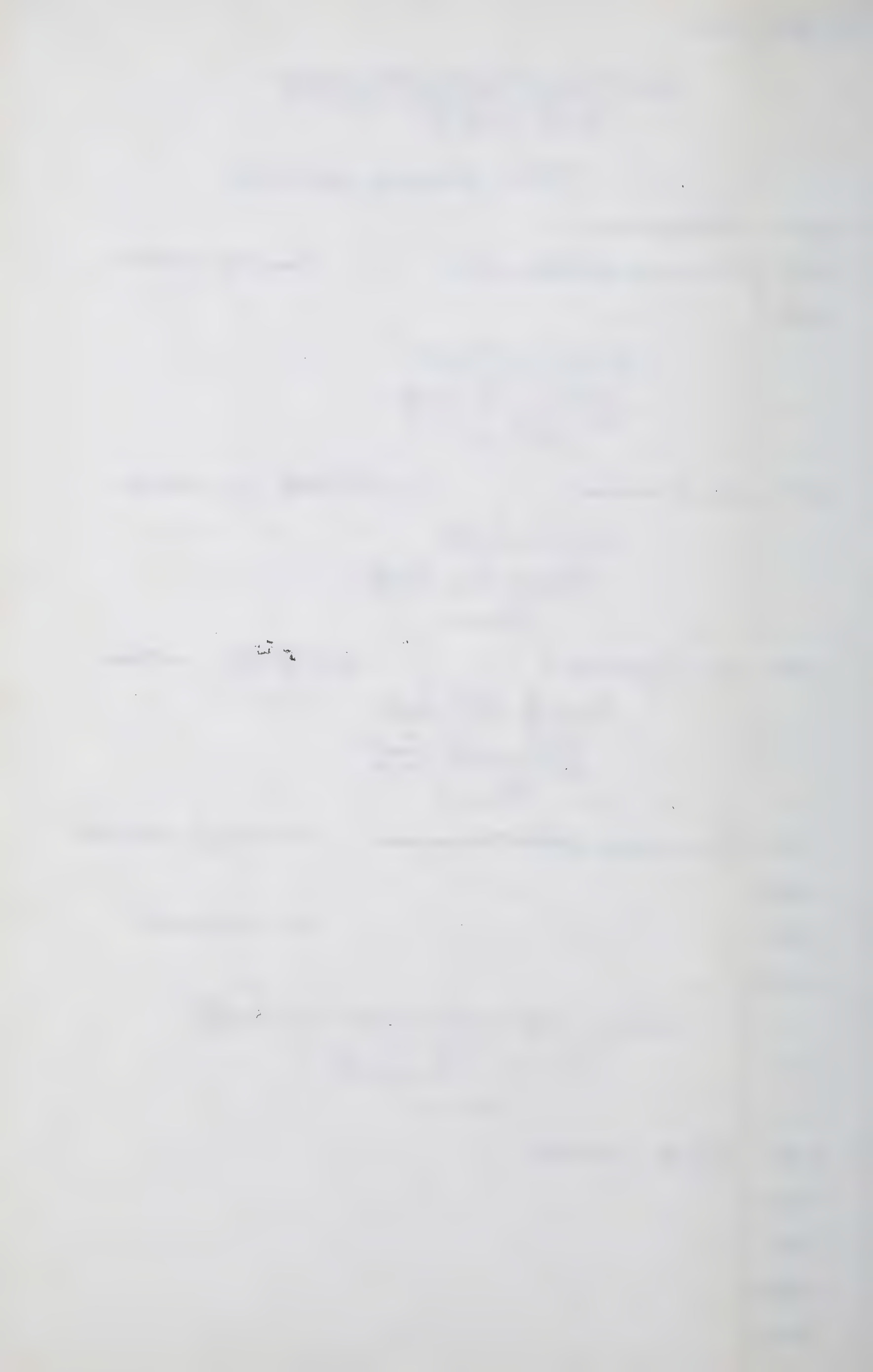
"

"

3194

"

"



Sana Creek, 340 feet, 5 mi. W Arbuckle
Colusa Co., Calif.
 Mar. 8

3195 *Hyla regilla*

3196 " "

3197 " "

3198 " "

3199 " "

3200 " "

3201 " "

3202 *Rana boylei*

7 mi. NW Zamora

Yolo Co., Calif.

Mar. 9 (itinerary pp. 203 A-D)

3203 *Bufo boreas*

S. F. Cook, Jr. collector

3204 *Sceloporus o.*

W. W. Dalquest "

3205 " "

9 mi. NE Winters

Yolo Co., Calif.

Mar 9

3206 *Hyla regilla*

3207 " "

S. F. Cook, Jr., collector

3208 *Sceloporus o*

" "

3209 " "

" "

3210 " "

" "

3211 " "

" "

3212 " "

" "

3213 " "

" "

3214 " "

1 mi. S Winters, in
Solano Co., Calif.

Mar. 9

3215 *Bufo boreas halophilus*

3216 " " "

3217 *Hyla regilla*

3218 " "

3220 *Sceloporus o.*

S. F. Cook, Jr., collector

3221 " "

11 mi. NW Rio Vista,
Solano Co., Calif.

Mar. 9

3222 *Hyla regilla*

3223 " "

3224 " "

3225 " "

3226 " "

3227 " "

3228 " "

3229 *Sceloporus o.*

Mus. Vert. Zool., Univ. Calif., Berkeley
Alameda Co., Calif.

Mar. 18

5 mi. S. Brentwood
Contra Costa Co., Calif.
 Feb. 8

3230 *Eumeces*

3231 "

3230, 3231, collected and given to me by Phil. Meritt.

Bald Peak, Berkeley Hills
Contra Costa Co., Calif.
 April 14

- 3232 *Eumeces skiltonianus*
 3233 " "
 3234 " "
 3235 " "
 3236 " "
 3237 " "
 3238 " "

Some of above 7 specimens were collected on the west side of Bald Peak (within 100 yds. of top) and some were collected 1/2 mi. farther NW along San Pablo Ridge. While I collected these 7 specimens, Walter Dalquest collected about 17. [About two hours time spent.] ^{added Feb. 25, 1943}

Mus. Vert. Zool., Univ. Calif., Berkeley

April 17

Acc. no. 6816

woods bordering Mt. Hood Highway, 8.7 mi SE Sandy,
Clackamas Co., Oregon

April 3, 1942

- 3239 *Plethopsis wrighti* MVZ 37355 ^{see species notes}

Mus. Vert. Zool., Univ. Calif., Berkeley

April 20

Bald Peak, 1850 ft., Berkeley Hills
Contra Costa Co., Calif.

April 19

- 3240 *Sceloporus o.*

3241 "

- 3242 *Crotalus v.*

Bala Peak, 1850 ft., Berkeley Hills
Contra Costa Co., Calif.

April 19

3243 *Eumeces skiltonianus*

3244

3245

3246

3247

3248

3249

3250

3251

3252

3253

3254

[about 2 1/2 hours
 spent this day] note
 added Feb. 25, 1943

37 specimens; 3 collectors } W.H.D., T.R., and
 Viola Memmler

Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

April 24

22 Bret Hart Road, Berkeley
Alameda Co., Calif.

April 22, 1942

3255 *Diadophis*

melanistic - {black on back and on complete
 almost complete bars across
 belly. Ring completely obscured.

collected by Sherburn Cook, Jr. at his home.

Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

April 30

San Joaquin Experimental Range, O'Neals
Madera Co., Calif.

April 12, 1938

3256 *Eumeces g. gilberti* - Kept in captivity in my office from
 16 [collected April 12, rec'd 13 in sp. notes] [given to me April 16, 1938, see sp. notes p. 11]

April 17, 1938 to April 30, 1942 - recorded before as a
 group under 1016 in this catalogue. This is the last one to
 die. It is also the
 largest one.



J. Rodgers-1942

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
May 2

Acc. no. 6825

1 mi. NW Orinda

Contra Costa Co., Calif.

April 29

3257 *Contia tenuis* see spec. note for color record.
young specimen brought in by camp.

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

May 7

East side Bald Peak, 1800 ft., 1 mi. E Berkeley,

in Contra Costa Co., Calif.

May 3

3258 *Sceloporus o.*

3259 " "

3260 *Eumeces skiltonianus*

3261 " "

3262 " "

3263 " "

3264 " "

1 1/4 mi. SSE Bald Peak, 1450 ft., Berkeley Hills

Contra Costa Co., Calif.

May 6

3265 *Gerrhonotus m.*

3266 *Eumeces s.*

3267 " "

3268 " "

3269 " "

3270 " "

3271 " "

3272 " "

J. Rodgers - 1942

1 1/4 mi. SSE Bald Peak, 1450 ft., Berkeley Hills,
Contra Costa Co., Calif.

May 6

3273 *Eumeces s.*

3274 " "

3275 " "

3276 " "

3277 " "

3278 *Coluber c.*3279 *Diadophis a.*3280 *Aneides*

Mus. Vert. Zool., Univ. Calif., Alameda Co., Calif.

May 11

Acc. 6795

4 mi. W La Grange, Stanislaus Co., Calif.

Mar. 5, 1942

3281 *Eumeces gilberti* } collected by Carol M. Seneel, from
 3282 " " } under rocks thrown up by
 gold dredge.

Mus. Vert. Zool., Univ. Calif., Alameda Co., Calif.

May 26

1 1/4 mi. SSE Bald Peak, 1800 ft., Berkeley Hills,
Contra Costa Co., Calif.

May 24

3283 *Gerrhonotus m.*

3284 " "

(collected by J. Gray)

3285 *Eumeces s.*

3286 " "

3287 " "

3288 " "

3289 " "

1/4 mi. SSE Bald Peak, 1800 ft., Berkeley Hills,
Contra Costa Co., Calif.

May 24

3290 *Eumeces s.*

collected by S. F. Cook, Jr.

3291

" "

"

"

3292

" "

"

"

3293

" "

"

"

3294

" "

"

"

3295

" "

"

"

3296

" "

"

Jean Boulware

3297

" "

"

"

3298

" "

"

"

3299

" "

"

"

3300

" "

"

"

3301

" "

"

Janet Failla

3302

" "

"

"

3303

" "

"

"

3304

" "

3305

" "

3306

" "

3307

" "

3308

" "

3309

" "

3310

" "

[About two hours
 spent collecting] - note
 made Feb. 25, 1943

Mus. Vert. Zool., Univ. Calif., Alameda Co., Calif.

June 1

Acc. no.

3311

Lampropeltis triangulum

see sp. note p. 1

Mus. Vert. Zool., Alameda Co., Calif.

June 1

Acc. no

3 mi. S Yelm, Thurston Co., Wash.April ~~June~~ 6-8, 19423312 *Ambystoma macrodactylum* MVZ 373562 1/2 mi. E Stevenson, Skamania Co., Wash.April ~~June~~ 6-8, 19423313 *Rhyacotriton olympicus* MVZ 373572 mi. E Stella, Cowitz Co., Wash.April ~~June~~ 6-8, 19423314 *Plethodon dunni* MVZ 37358 *ap. notes p. 1.*2 1/2 mi. E Stevenson, Skamania Co., Wash.April ~~June~~ 6-8, 19423315 *Plethodon intermedius (= vehiculum)* MVZ 37359Albany, Linn Co., Oregon

April 6-8, 1942

3316 *Triturus granulatus* MVZ 37360Mus. Vert. Zool., Univ. Calif., Alameda Co., Calif.

June 8

San Pablo Ridge (east rim of Wild Cat Canyon), 1350-1550 ft.,Contra Costa Co., Calif.

June 7

3317 *Eumeces skiltonianus* col. by Milton Hildebrand

3318 " " "

3319 " " "

3320 " " "

3321 " " "

3322 " " "

3323 " " "

3324 " " col. by Walter W. Dalquest

San Pablo Ridge (east rim of Wild Cat Canyon), 1350-1550 ft.,
Contra Costa Co., Calif.

June 7

3325	<i>Eumeces skiltonianus</i>	col. by W.W. Dalquest
3326	"	"
3327	"	"
3328	"	col. by Janet Failla
3329	"	"
3330	"	col. by Peggy Dalquest
3331	"	"
3332	"	"
3333	"	"
3334	"	[About two hours spent collecting] note made Feb. 25, 1943
3335	"	
3336	"	

3337	<i>Gerrhonotus multi-carinatus</i>	col. by W.W. Dalquest
3338	<i>Coluber c. mormon</i>	"

Mrs. Vert. Zool., Univ. Calif., Berkeley, Calif.

June 22

1/2 mi. SE Bald Peak, 1700 ft., Berkeley Hills
Contra Costa Co., Calif.

June 21

3339	<i>Eumeces skiltonianus</i>	I. McT. Cowan collector
3340	"	"
3341	"	"
3342	"	Viola Memmler
3343	"	"
3344	"	Milton Hildebrand
3345	"	"
3346	"	"

1/2 mi. SE Bald Peak, 1700 ft., Berkeley Hills
Contra Costa Co., Calif.

June 21

- 3347 *Eumeces skiltonianus* Janet Failla collector
 3348 " " " "
 3349 " " " "
 3350 " " Robert Storer "
 3351 " " "
 3352 " " "
 3353 " " "
 3354 " " "
 3355 " " [About two hours spent collecting] not
 3356 " " added Feb. 25, 1943

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 6

1/2 mi. SSE Bald Peak, Berkeley Hills
Contra Costa Co., Calif.

July 5

- 3357 *Eumeces skiltonianus* taken at 11:00 am (foggy) by R. H. Miller
 1000-1100 ft.
2 mi. SE Bald Peak, Berkeley Hills
Contra Costa Co. Calif.

July 5

- 3358 *Eumeces skiltonianus*
 3359 *Triturus torosus* spec. note

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 15, 1942

Acc. 6875

- ~~3360 *Sternotherus odoratus*~~
~~3361 *Kinosternon subrubrum*~~
~~3362 " "~~

Acc. 6875 (cont.)

Anslow Co., North Carolina

June, 1942 (killed July 9, 1942)

- 3360 *Sternotherus odoratus* Skeleton
 3361 *Kinosternon subrubrum*
 3362 " "
 3363 " "
 3364 " "
 3365 *Chelydra serpentina*
 3366 " "
 3367 *Clemmys guttata*
 3368 " "
 3369 *Terrapene carolina*
 3370 " " skeleton
 3371 " " "
 3372 " " "
 3373 " " "
 3374 " " "
 3375 *Pseudemys floridana* " + 8 of 16 eggs
 3376 " " "
 3377 " " "
 3378 *Pseudemys scripta* skeleton

Acc. 6877

Anslow Co., North Carolina

June, 1942 (killed July 14, 1942)

- 3379 *Heterodon contortrix*
 3380 *Elaphe quadrivittata*
 3381 " "
 3382 *Sistrurus miliaris miliaris*
 3383 *Agkistrodon mokasen mokasen*

Acc. 6877 (cont.)

Onslow Co., North Carolina

June, 1942 (killed July 14, 1942)

3384 *Agkistrodon mokasen mokasen*

3385 " "

3386 " "

Mrs. Vert. Zool. Univ. Calif., Berkeley

July 21

Acc. 6880

Central Florida

Summer, 1940

3387 *Farancia abacura abacura*5 mi. N. NogalesSanta Cruz Co., Arizona

Aug 1, 1941

3388 *Uta ~~graciosa~~*3389 *Lampropeltis getulus splendida* toward *L. g. yumanensis*Sabino Canyon, 18 mi. N TucsonPima Co., Arizona

July 30, 1941

3390 *Crotalus tigris*White Sands Nat. MonumentOtero Co., N.M.

July 15, 1941

3391 *Holbrookia*3392 *Sceloporus*

Acc. 6882

Cotulla, La Salle Co., Texas

July 16, 1942 (killed July 20, 1942)

3393 *Phrynosoma*

[3393-3410 all hatched from one group (clutch?) of eggs]

J. Rodgers-1942

Acc 6882 (cont.)
Cotulla, La Salle Co., Texas

July 16, 1942 (killed July 20, 1942)

3394 *Rhynchosoma*

3395 "

3396 "

3397 "

3398 "

3399 "

3400 "

3401 "

3402 "

3403 "

3404 "

3405 "

3406 "

3407 "

3408 "

3409 "

3410 "

Mus. Vert. Zool., Univ., Calif., Berkeley

July 22

2 mi. S E Bald Peak, 1000'-1100', Berkeley Hills

Contra Costa Co., Calif.

July 19

3411 *Eumeces skiltonianus*

3412 *Gerrhonotus multi-carinatus*

J. Rodgers-1942

1/2 mi. SW Bald Peak, Berkeley Hills
in Alameda Co., Calif.

July 21, 1942

- 3413 *Eumeces skiltonianus* ♀ with nest no. 4 (first nest found in field.)
Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

July 26, 1942

1/4 mi. N Bald Peak, San Pablo Ridge,
Contra Costa Co., Calif.

July 25, 1942

- 3414 *Eumeces skiltonianus* ♀ with nest no. 5
Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

Aug. 10, 1942

1/2 mi. SW Bald Peak, Berkeley Hills,
in Alameda Co., Calif.

Aug 9, 1942

- | | | | | |
|------|-----------------------------|---|---------------------------|---|
| 3415 | <i>Eumeces skiltonianus</i> | | | |
| 3416 | " | " | | |
| 3417 | " | ← | parent | see species note, p. 50 (Nov. 17, 1942) |
| 3418 | " | ← | young; killed as captured | Nest no. 6 |
| 3419 | " | ← | " | " " " |
| 3420 | " | " | " | kept alive |
| 3421 | " | " | " | " " |
| 3422 | " | " | " | " " |

On the skink hunting expeditions of July 5, 19, 21, 25, and Aug 9, all the specimens of reptiles we saw, we collected, with the exception of 2 to 5 Sceloporus each time. Also about 2 to 5 Sceloporus that were collected, were given to Jacob Frenkel. We usually started home at about the time Sceloporus was becoming active. June 21, we stayed out & caught 25 ± Sceloporus. But no snakes on these trips.

D. Rodgers - 1942

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug. 12

Acc. no. 6885

Evolution Lake, 10990 ft., King Canyon N.P.Fresno Co., Calif.

July 26, 1942

- 3423 *Bufo canorus* collected by Joseph Dixon
(#9220) in the meadow at the upper end
of Evolution Lake

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug 17

Hatched in lab. in M.V.Z.

probably Aug 16 (possibly Aug 15), 1942

- 3424 *Eumeces skiltonianus*

3425

"

"

3426

"

"

3427

"

"

3428

"

"

Mus. Vert. Zool., Univ. Calif., Berkeley

Aug. 25

1/2 mi. SE Bald Peak, ~~170-1600~~ ft., Berkeley HillsContra Costa Co., Calif.

Aug 23, 1942

- 3429 *Aneides lugubris*

- 3430 *Sceloporus occidentalis*

- 3431 *Eumeces skiltonianus*

3432

"

"

3433

"

"

3434

"

"

3435

"

"

1/2 mi. SE Bala Peak, Berkeley Hills
Contra Costa Co., Calif.

Aug 23, 1942 (cont.)

3436 *Lampropeltis getulus boylii*

3437 *Crotalus v. oreganus*. col. by W.W. Dalquest

Sept 6, 1942

3438 *Eumeces skiltonianus*

3439 "

3440 "

Univ. Calif. Campus, west of Campanile
Berkeley, Calif.

Sept 9, 1942

List of bird species recorded on a walk around the west end of the campus, between 1:10 and 3:00 p.m.

Sept 9, 1942

- | | |
|----------------------------|---------------------------|
| 1. Bush Tit | 21. White-crowned Sp. |
| 2. Song Sparrow | 22. English Sparrow |
| 3. Anna Hummer | 23. Plain Titmouse |
| 4. Pileolated Warbler | |
| 5. Brown Towhee | |
| 6. Flycatcher | 4? {slightly larger than |
| 7. Black Choebe | note. (lower & different) |
| 8. Allen or Rufous Hummer | |
| 9. Olive-sided Flycatcher | |
| 10. Linet | |
| 11. Robin | |
| 12. Hutton Vireo | |
| 13. Black-headed Grosbeak | |
| 14. Junco | |
| 15. Sparrow Hawk | |
| 16. Pine Siskin | |
| 17. Cal. Jay | |
| 18. Calif Quail | |
| 19. Spotted Towhee | |
| 20. Green-backed Goldfinch | |

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

Sept. 22, 1942

3/4 mi. SE Bala PeakContra Costa Co., Calif.

Sept. 20

3441 *Gerrhonotus multi-carinatus*3442 *Eumeces skiltonianus*

3443 " "

3444 " "

Harold Miller collector

3445 " "

Alice Kerr "

3446 *Crotalus v. oreganus* 648 + 52 + 47 mmMus. Vert. Zool., Univ. Calif., Berkeley

Oct 13, 1942

Bala PeakContra Costa Co., Calif.

Oct 11,

3447 *Sceloporus occidentalis*3448 *Eumeces skiltonianus*

3449 " "

3450 " "

3451 " "

Mus. Vert. Zool., Univ. Calif., Berkeley

Oct. 20, 1942

Bala PeakContra Costa Co., Calif.

Oct 18

3452 *Eumeces skiltonianus*

3453 " "

3454 " "

3455 " "

The first part of the paper discusses the importance of maintaining accurate records of all transactions. It is essential for the company to have a clear and concise system in place to ensure that all data is properly recorded and stored. This will allow for easy access and retrieval of information when needed.

The second part of the paper focuses on the importance of regular communication and collaboration between all team members. It is crucial for everyone to stay informed and up-to-date on the latest developments and changes within the organization. This will help to ensure that everyone is working towards the same goals and objectives.

The third part of the paper discusses the importance of maintaining a high level of security and confidentiality for all company data. It is essential to implement strong security measures to protect sensitive information from unauthorized access and theft. This will help to ensure that the company's reputation and financial stability are not compromised.

The fourth part of the paper focuses on the importance of regular training and development for all employees. It is crucial for everyone to stay up-to-date on the latest skills and knowledge in their field. This will help to ensure that the company is always at the forefront of its industry and able to compete effectively in the market.

The fifth part of the paper discusses the importance of maintaining a positive and productive work environment. It is essential to foster a culture of respect, collaboration, and innovation. This will help to ensure that all employees are motivated and engaged in their work, leading to increased productivity and success for the company.

The sixth part of the paper focuses on the importance of regular financial review and analysis. It is crucial for the company to have a clear understanding of its financial health and performance. This will help to ensure that the company is able to make informed decisions and manage its resources effectively.

The seventh part of the paper discusses the importance of maintaining a strong and effective marketing strategy. It is essential to have a clear understanding of the target market and to develop a plan to reach and engage with them. This will help to ensure that the company is able to attract and retain customers, leading to increased sales and revenue.

The eighth part of the paper focuses on the importance of regular customer feedback and analysis. It is crucial for the company to have a clear understanding of what its customers think and feel about its products and services. This will help to ensure that the company is able to make improvements and better serve its customers, leading to increased loyalty and repeat business.

The ninth part of the paper discusses the importance of maintaining a strong and effective legal and compliance framework. It is essential to have a clear understanding of all applicable laws and regulations and to ensure that the company is in full compliance with them. This will help to ensure that the company is able to operate legally and avoid any potential legal issues or fines.

The tenth part of the paper focuses on the importance of regular risk assessment and management. It is crucial for the company to have a clear understanding of all potential risks and to develop a plan to mitigate them. This will help to ensure that the company is able to identify and address any potential threats to its operations, leading to increased resilience and stability.

Bald Peak
Contra Costa Co., Calif.

Oct. 18, 1942

3456 *Eumeces skiltonianus*

3457 " "

3458 " "

1700 ft.,
San Pablo Ridge, 400 yds NNW Bald Peak
Contra Costa Co., Calif.

Nov. 8, 1942

3459 *Eumeces skiltonianus*

collected by Chas. G. Sibley

3460 " "

3461 " "

3462 " "

3463 " "

3464 " "

3465 " "

3466 " "

3467 " "

3468 " "

3469 " "

3470 " "

collected by Chas. G. Sibley

3471 " "

Nov. 23, 1942

3472 *Eumeces skiltonianus*

3473 " "

Nov. 26, 1942

3474 *Eumeces skiltonianus*

3475 " "

3476 " "

3477 " "

3478 " "

1³/₄ mi. SE Bala Peak, 750 ft.,
Contra Costa Co., Calif.

Dec. 17, 1942

- 3479 *Ensatina eschscholtzii*
3480 *Nyla regilla*
3481 *Eumeces skiltonianus*
3482 " "
3483 " "
3484 " "
3485 " "
3486 " "
3487 " "
3488 " "
3489 " "
3490 *Contia tenuis*

General account of trip Dec. 17, see under spec. acc.
of *Eumeces skiltonianus*, pp. 53, 55.

Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
1

Part II

J. Rodgers - 1942

3

Aneides l. lugubris

June 5 2 mi SE Bald Peak, 1080 ft, Contra Costa County, Calif.
See notes with Triturus torosus (p. 9). Salamanders
out wandering around on cold morning in moisture
from condensing fog on dry grassy ridge.

Dec. 17 1 3/4 mi. SE Bald Peak, 750 ft, Contra Costa Co, Calif.
Many young seen under rocks. see E. skiltonianus, p. 54.

Anniella pulchra

Nov. 6 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Color records and measurements of a specimen sent in alive by Chas. M. Miller, Nov. 5. Color records (made from live specimen) from Ridgway, 1912. Measurements of freshly killed specimen (T.R. 2832).

Nosum slightly grayer than Hair Gray (Plate XLVI, 17''', i) but with a faint tinge of yellow.

Along the sides, just below the black lateral lines is an almost continuous mottling of yellow (Olive-Ocher, Plate XXX, 21'', anterior, blending to Wax Yellow, Plate XVI, 21', posteriorly and on tail). Anteriorly, this yellow blends with Cinnamon-Drab (Plate XLVI, 13''') medially. Posteriorly, it blends with Yellow Citrine (Plate XVI, 23', i) ventrally. On the tail, it is mottled with a color slightly more buffy than Pale Olive-Gray (Plate LI, 23''', f) medially. At about the middle (half-way back) on the ventrum, where the Cinnamon-Drab and Yellow Citrine there is a mottling of Storm Gray (Plate LII, 35'''). The yellow of the sides is present over the whole ventrum in small spots of uneven sizes and shapes. These spots are most common posteriorly. Greatest body width = 4.7 mm.

Snout to vent = 12.5 mm. Tip of snout to post. border of 6th supralabial = 4.0 mm.

Tail length = 15.5 mm. Head width, across largest supraoculars = 3.0 mm.

Tip of snout to anterior border of orbit = ^{3.1 mm.} ~~2.9 mm.~~ Tip of snout to post. margin of second interparietal = 5.4 mm.

Arizona elegans

Nov. 11 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
(male)

Notes on MVZ specimen 36474, received alive Nov. 3, 1941, from A. E. Barell. Collected by him Oct. 21, 1941, 11 mi. N Albuquerque, Sandoval Co., New Mexico. Note by Barell, "Found on rainy day, in very sandy soil."

Identified here as A. e. elegans, but with a number of dorsal blotches that puts one above the maximum for the race according to Blanchard's key.

When the snake was put into a terrarium, on soft but rather coarse sand, it crawled slowly across the cage (about 16") by an indirect route, holding its head about $1\frac{1}{4}$ " above the sand and set off to the side about $\frac{1}{2}$ ". When it reached the other end, it nosed down into the sand and burrowed down into it as neatly as an Anniella or a Sonora. Meas. 220 + 37 mm. - while chloroformed.

Color records from Ridgway (1912), made just after it was chloroformed. Ground color between blotches on back, Gray (Light Gull Gray) (Pl. LIII, Carbon Gray, f. * 9). Lowest two scalerows and sides of belly scutes lighter than Pallid Purplish Gray (Pl. LIII, 67""", g). This color extends across the free edges of the ventral scutes; the rest of the area of the scutes is darker, very near Pallid Purplish Gray.

Dorsal blotches, ^{between} Benzo Brown and Hair Brown (Pl. XLVI, 15""", h) anteriorly, darkening gradually posteriorly to Fuscous (Pl. XLVI, 13""", k) on the tail. Dark marking from eye to angle of mouth, slightly more reddish

Arizona elegans

Nov. 11 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
than *I. ussouriensis*. Iris gray (about as on back)
dorsally, ~~and~~ lighter (about as on lower scale
rows of sides) ventrally, and a dark smudge
anteriorly and posteriorly. Also, in the lower
half of the iris there is a faint streak of
Orange - Cinnamon (Pl. XXIX, 13").

Batrachoseps attenuatus

Oct. 12 Austin Creek, 90 ft., 1 mi. s Cazadero, ~~Creek~~ Sonoma Co., Calif.
About 6:30 pm, one of the boys on the Grinnell Naturalists Society trip (Emery Johnson) found a Batrachoseps crawling on the surface of a dry rock at the foot of the bank along the road about 200 yards s of the Berkeley City Camp. No other salamanders were found either under objects or on the surface of the ground. The only other salamanders found were Iriturus similans, and they were in a pool.

Cnemidophorus tessellatus

June 7 - see no. 2656

Aug. 15. Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

No. 2167, a large male from Arroyo Mocho has been eating 10+ meal worms a day for the past few days (others have also been eating). At 11:00 am to-day 2167 was seen standing high on back legs, back and tail arched and defecating. The stool was 41 mm. long and a slightly larger in diameter (6 mm) in the middle than at the ends. The first end to be deposited, was white for 9 mm., the rest was black. The lizard walked along about 55 mm. while depositing the stool. When the final end broke loose, the tail was bent around to nearly 90° to the side and the lizard crawled about 10 inches sliding its vent region on the sand. Then it turned, walked back and, with its right front foot, pushed sand over the fresh stool. It made three fast strokes forward pushing the sand.

11:20 2173 ♂ defecated but did not cover the stool
2172 ♀ is least active and does not eat much.

She is thinner than the others. 2172 ♀ & 2173 ♂ are from Madera Co. 2167 ♂ and 2168 ♀ are from Arroyo Mocho. 2168 ♀ is very active

Aug 30 Mus. Vert. Zool. ^{11:10 am.} No 2168 ♀ was coming out of the carabao shelter. It kicked sand violently twice as if trying to pull its tail loose from something inside the shelter that was holding it. It pulled a loose, and I noticed that the distal 2 inches of its tail

Cnemidophorus tessellatus

Aug 30 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
is crooked, dry and dead appearing. I lifted the
shelter and could not find anything that the tail
could have been caught on but 2172 ♀ was inside.
Could 2172 ♀ have been holding 2168 ♀ by the end of
its tail.

Sept. 27 Clipped toe nails of 2168. Four or five
were slipped close enough to bleed a little.
I painted them with iodine. The ~~toe~~ claws
do not seem to wear down as much as
they should in this cage. Possibly there is not
enough solid rock or packed sand. Even
when they dig to the bottom they have only
smooth glass to dig against.

Oct 17 2168 OK - did not seem to suffer. Except for
occasional cold days, all four captive whiptails
have been out every day and have eaten
readily and heartily for at least two months
now - probably longer. ~~When~~ They have been
fat and healthy looking for about two months.
When they first started coming out regularly
some of them looked pretty thin.

Oct. 29 Following are weights & measurements

Markings	Number	Sex	Snout-vent length (mm)	Tail length (mm)	Weight (grams)
2LF, 5LH	2168	♀	120	177	35.7
2RF	2167	♂	112	274	34.1
1LF	2172	♀	101	145+19	20.7
1, 5RF	2173	♂	91	208	22.4

Cnemidophorus tessellatus

Nov. 7 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Joseph Dixon was in to-day and told me of seeing a
whiptail with a total length of less than 6 inches, at
Colony Mills, Ranger Station, Sequoia National Park,
Sept. 15, 1940. Yesterday, Earl S. Herald brought in a
young of the season that was collected at Ash
Mountain, Seq. N.P., Aug. 23, 1940; it is now MVZ 33853

Cnemidophorus tesselatus

Feb. 13 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

No. 2167, a male from Arroyo Mucho, Alameda County, and 2173, a male from Madera County, were came out about 11:00 am. to-day. 2173 seems to be in good condition, 2167 is very thin and inactive. 2173 ate at least 2 meal worms.

~~2167~~ 2167 ate one larva and fumbled with a pupa but couldn't seem to get it to start down its throat. I took him in my hand and he ^{took} ~~ate~~ two more pupae from forceps and swallowed them with no trouble at all. I offered him one with some Panastol in it but he refused it. I opened his mouth and fed it to him then put him back in the cage with his chin in the water dish. He lapped up water for 15 or 20 seconds. 2167 drank some water several minutes later, after leaving the water dish ^(12 or 13 inches) and returning. 2167 perked up considerably, but is very thin, and still not nearly as lively as 2173.

I have not seen any whiptails out for at least two months. One or two may have been out yesterday, judging from slight changes around the entrance. 2167 is drinking again - after 5 ± minutes of standing near the water dish. He sure seems to be filling up on water. To-day the sky is hazy, with clouds above the haze, as indicated by marked fluctuations in the brightness with which the sun shines thru the haze. 2173 has just shed. The skin on the tail has not been shed yet. 2173 was still out at 1:10 pm., but 2167 has gone in.

Cremnophorus tessellatus

Mar. 15, 1941 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
2173 stayed out on top of the sand last night and looks very thin and inactive. This morning I opened its mouth and pushed a mealworm pupa and a drop of sand into its throat, then a drop of water. It keeps its eyes closed most of the time but moves around the cage and tries to climb up the corners much of the time. The sun is warm enough so that 2167 came out on its own volition and is lying on the sand in the sun. Another lizard (probably 2172) has its head sticking out of the entrance to one of the retreats. Both the others are at the entrance. 2167 is having a big feast. It has eaten at least a dozen mealworms in about 10 minutes. The others (the one other) in the entrance are also eating a few.

May, ?, 1941 No. 2173, collected in May, 1939, died this month

Cnemidophorus tessellatus

Jan. 12 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 no. 2168 ♀ died to-day. snout-vent 116 mm.; tail recently
 withered away - distal $\frac{1}{3}$ l.; wt. 33.3 g. Collected
 in May, 1939, Arroyo Moscos, by John Tash. Resid. in
 MZ. June 16. 2 LF toe cut off, 5 LH later lost.

Summary of wts. & measurements of 2168 ♀

	snout-vent l.	tail l.	wt.
Sept. 14, 1939	118	241 (broken)	42.4
Dec. 12, "	118	243	37.5
Oct. 29, 1940	120	177	35.7
Jan. 12, 1942	116	—	33.3

Feb. 9. 2167 ♂ ~~was~~ was chloroformed Saturday.
 It had become very thin and stayed on top of
 the sand all the time. Its left front foot had
 become swollen, and the second and fifth toes
 were gone. It was not weighed, but length from
 snout to vent is 117.5 mm. & the length of a broken
 tail is 193 mm.

in Madera Co.

Aug 10 no. 2172, collected in May, 1939 (see p. 108) was
 found dead and dried up today. I saw it out about
 2 months ago. This is the last whiptail to die. At
 present, I have none in captivity.

Summary of no. 2172 ♀

	snout-vent l.	tail l.	wt.
Sept 14, 1939	101	234	36.3
Dec. 12 "	102	146 + 15	23.4
Oct. 29, 1940	101	145 + 19	20.7

Died in June[±], 1942; found dried up Aug 10, 1942

Coleonyx variegatus

Feb. 7 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
I have a male Coleonyx that John Chatter collected, Jan 13, 1940, 2 mi. SW Potholes, 150 ft., Imperial Co., Calif. It is in a cage (about 11" x 18" floor space) with 2 or 3 Uta, 2 or 3 Sceloporus, 1 horned toad and about 6 skinks. To-day at 2:10 pm, ^{when} ~~with the sun~~, ^{was} shining directly on the cage (and the lizard) I suddenly heard it squeaking. It made at least 3 lunges at a medium large Eumeces gilberti, each time squeaking. The skink left. I believe the skink had just happened to approach to within an inch or two (or over) the Coleonyx.

flagellum
Coluber ~~constrictor mormon~~

Sept. 10. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif. Color description of Coluber flagellum. Specimen collected by S. V. Cook Jr. 12 mi. SW Fernley, Lyon Co., Nevada, May 30, 1941. (T. R. 2773, p. 186 acc. no. 6845). From Ridgway, Col. St. and Nom., 1912. *Shed its skin on Sept. 9*

Top of head between Buffy Brown and Olive-Brown (Pl. XL, 17'', j). General appearance of dark parts of back about the same, with distal ends of scales Olive-Brown and proximal ends Light Grayish Olive (Pl. XLVI, 21''). Lighter scales of back are less green than Light Grayish Olive (no green). The basal ends of the darker scales along the first 6 inches of the back and sides are edged with a color that is Apricot Orange (Pl. XXVIII, 11''). The basal ends of the lighter scales are edged (especially laterally) with white. Posterior to the first 6 inches, all the scales are edged proximally with White or Tawny-Olive (Pl. XXIX, 17'', i).

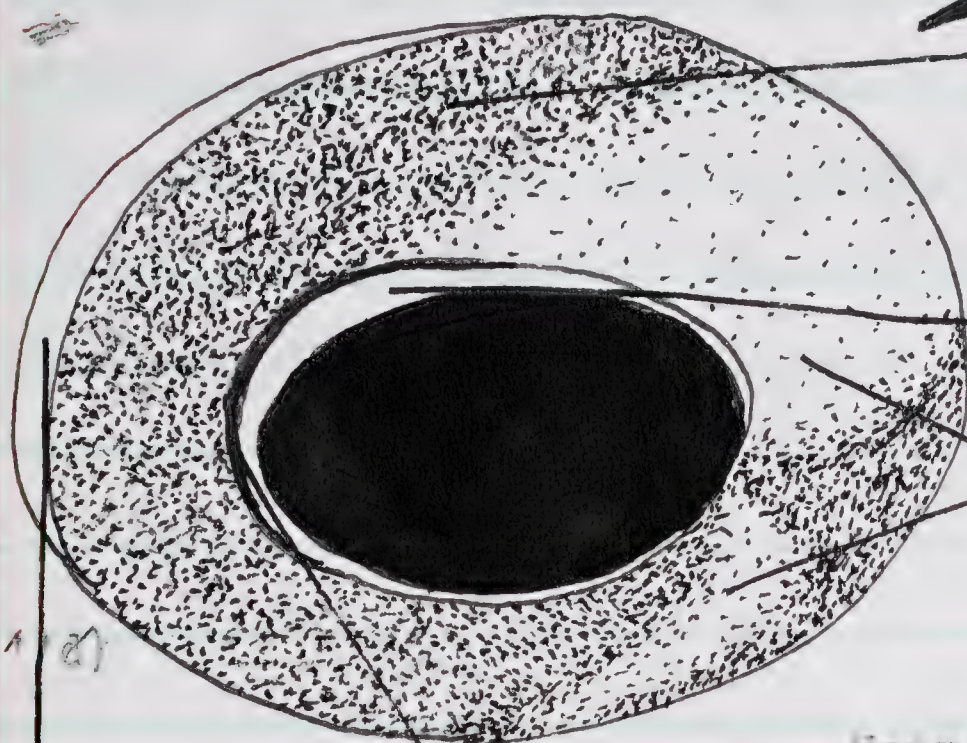
The snake is lighter at the tail (gradual gradation throughout whole length of snake). Scales on the tail are slightly darker and slightly grayer than Buffy Brown (Pl. SL, 21'', j) distally and less green than Dark Olive-Buff (Pl. XL, 21'') proximally.

The scales with white edged bases are so arranged as to give an indistinct affect of transverse lines or rings extending from one edge of the ventral scutes, over the back to the other edge of the scutes.

Under side of head and first inch of throat white, spotted with brown, slightly lighter than on top of head. Next foot of body Cream-Buff, which, on close examination can be seen to be mottled with white. Along this section of belly, there is a double row of light brown spots that are tinged and surrounded with Cream-Buff. The rest of the belly, back to the vent, is lighter, with a pearly luster. It appears Pale Pinkish Buff (Pl. XXIX, 17'' f) in the right light and, laterally with belly, Primrose Yellow (Pl. XXX, 23'', d). The ventral side of the tail has more Pale Pinkish Buff and less Primrose Yellow.

Coluber flagellum constrictor gerrhonotus

Sept. 10. Mus. Vert. Zool., Univ. Calif., Berkeley
Color Description of T. R. 2773 (cont.) *eye*



Darker than Olive-Brown (Pl. XL, 17'', k) but not purple as clove Brown (m).

Ivory yellow (Pl XXX, 21'', f)

Near Ivory yellow (Pl XXX, 21'', e)

Near Ochraceous-Orange (Pl XV, 15', e)

Dawn Gray ~~XXXX~~
(Pl ~~XX~~ LII, 35, ''a)

awn Gray
Pl LII, 35, ''a)

Contia tenuis

May 2 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Color record of young specimen brought in alive by
Dr. Chas. L. Camp, May 2. Found at his place 1 mi. NW
Orinda, April 29. Dorsolateral lines, Terra Cotta
(Pl. XXVIII, 7, "k"); Back, Cane Brown (Pl. XXVIII,
7, "k"); Sides, gray.

Crotalus viridis oregonus

May 16, see no. 2628

Sept 17, see no 2680

Sept. 20, Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

The following color records are of young rattlesnakes that were removed from a freshly chloroformed female, my number 2680₁. The dorsal blotches on the darkest (2682) - MVZ 33713 (Pl. XL, 17" m) are faintly lighter than Clove Brown, centrally, and much darker around the edges. The blotches are progressively lighter on the others in approximately the following order 2683, 2685, 2684, 2686, 2681. The blotches on 2681 are ~~between~~ near Olive Brown (Pl. XL, 17", k), with darker edges. The blotches on the mother (2680) are between Olive Brown and Buffy Brown (Pl. XL, 17", j) anteriorly on the body and darker posteriorly; they are also edged with darker color. There are light edgings on the scales of the sides and belly that are between Light Vinaceous-Fawn and Vinaceous Fawn (Pl. XL, 15", d). Anteriorly the ventral scales are grayish ~~and~~ or brownish. Anteriorly, the scales on the sides are grayish or brownish also, but it is extremely variable on the sides, some scales being almost all the light color (Pl. XL, 15", d).

J. Rodgers - 1940

Diadophis amabilis

Oct. 31 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Yesterday, Mrs. Grinnell and Bernice Segel brought
in a young Ring-necked snake that they collected
on the west slope of Woolsey Canyon. It is acc. no.

6382, cat. no. 33851 and my number 2709.

(152 + 29 mm measured after chloroformed)

(measured alive)

Wt. 1.62 grams, length 161 + 29 mm. Dorsal surface
and ring around neck
totally black - no green. Belly, Bittersweet
Orange (Pl II, 9, b). Tail between Grenadine
Red and Flame Scarlet (Pl II, 8). Ventral
surface speckled with black.

Dicamptodon ensatus

Sept. 15 Mus. Vert. Zool. Univ. Calif., Berkeley, Alameda Co., Calif.
Color record, from Ridgway, of Dicamptodon
no. 35484, collected near Stephens Camp, Waddell
Creek, Santa Cruz Co., Calif., Sept. 14, 1941. Dark
parts of mottling, Mars Brown (Pl. XV, 13'k);
light parts, Verona Brown (Pl. XXIX, 13''k).

As I took this salamander in my hand
and held it while comparing it with the
key it started emitting water from its
vent. It continued for about one minute,
letting up somewhat twice, but increasing
the rate of emission after each let-up. All
together, it must have emitted 10 cc. or more.
This is the first time I have seen this reaction
in a salamander.

J. Rodgers - 1942

8

Ensatina eschscholtzii

Dec. 17, 1942 1 3/4 mi. SE Bald Peak, 750 ft., ^{Contra Costa Co.,} ~~Berkeley, Alameda Co., Calif.~~

many young seen under rocks - see Eumeces skiltonianus, p. 54.

Eumeces gilberti

Feb. 1 Mus. Vert. Zool., Univ. Calif., Alameda Co., Calif.

979 seems unable to maneuver a meal worm into its mouth. It takes hold of them but can not work them in.

Feb. 7, ^{the heads of} some of the big gilberts are getting distinctly brighter red. The last few days we have had sunny weather, and the skinks, as well as the other lizards have been out more active.

Feb. 28 No. 21 was found dead, and so badly decayed that I thought it ~~best~~ not worth saving. It has been discarded.

Feb. 29 Yesterday my attention was drawn to the dead skink (No. 21) by David Nichols' telling me that he saw ~~the~~ two lizards fighting, then noting that one was dead. It looked as if the dead one had been chewed on. To-day, at 3:40 p.m. I watched No. 1 swallow a piece of the tail of the dead No. 21. The piece was about $\frac{7}{8}$ inch long and about $\frac{1}{4}$ inch in diameter. The piece was still soft and apparently in better shape than the rest of No. 21, taken from the cage yesterday.

Mar 5 No. 22 is extremely bright now. No. 1 is contrastingly lacking in red; the head is only slightly brownish, and the tail is slightly yellowish. No. 22 is bright green, with a bright red head. The red extends back over the neck, and even onto the shoulders in small flecks. 1 + 22 took meal worms from

Rodgers-1940

Emmeces gilberti

Mar. 5 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
a short pair of forceps, 22 was a little hesitant.

Mar. 7 Jacob Frenkel has brought me some vitamin
concentrate that he says helped cure an ailment
that his ligands had, that was apparently like that
mine have. He described it as a nervous disorder
that followed constant feeding on mealworms.
The trade name is "Sanostol," made by
Chemische Fabrik Promonta G. m. b. H., Hamburg 26.
"Hergestellt aus vitaminreichem Leberölkonzentrat
vor allem des Heilbutts (Vitamine A und D)
und sonnengereiften, vitaminengesättigten
Citrusfrüchten (Vitamine C) unter Verwendung
diastasereichen Malzes (Vitamine B). Dosierung:
Kinder bis zu 3 Jahren 1-2 Teelöffel voll pro Tag.
Ältere Kinder und Erwachsene entsprechend
mehr. 6 Teelöffel voll sind in allen Fällen
ausreichend. - Therapeutische Dosen nach
Anweisung des Arztes."

I force fed 979 one meal worm and about
two drops of this vitamin concentrate.

20 and 14 each ate a meal worm that
had been dipped in it.

20 as well as 22 has a bright red head now;
20 not near as bright as 22. 14 has no red
on the head but a red tail; 20, about the same
size as 14 has a dull tail, with no red.
Neither 14, 20, nor 22 are sick. ^{Oct. 17, 1941 - 979 must have} died soon after this.

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J. Rodgers - 1940

Eumeces gilberti

Mar. 12 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
22 and 14 each ate a meal worm that had been dipped in Sanostol. They ate it very hesitatingly. They must have gotten a good drop each.

Mar. 13 No. 6 has been sick for some time. It gapes its mouth, and is getting thin. To-day I gave it one meal worm (with head taken off) that had been dipped in Sanostol.

July 16 A meal worm was crawling down into the crumbly dirt of the bottom of the cage. About $\frac{1}{3}$ of its length still showed, and that was among clods of about $\frac{1}{16}$ to $\frac{3}{16}$ inches in diameter. A Sceloporus made several stabs at it, but failed to get hold of it. A skink came along, nosed down between the clods and took the meal worm, with, apparently, no trouble at all.

Aug. 17 979♂ died to-day. It has been very thin and inactive for the last two or three weeks.

Oct. 28 The following is measurements and weights of the specimens in captivity. They have not been fed since Saturday (Oct. 26). They are also seen here on the basis of probing the hemipenes.

May 6 No. 6 died. (see pp. 1, 3, 17, 22, 28, 39 ±)

THE HISTORY OF

the first settlement of the colony of Virginia
in the year 1607. The first settlement
was made by a company of gentlemen
sent out by the Virginia Company
of London.

The first settlement was made
at Jamestown, on the James River,
in the year 1607. The first
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Eumeces gilberti

Oct. 28 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Oct 29	Markings	Number	Sex	Snout-vent length (mm)	Tail length (mm)	Weight (grams)	
	3LF						
	3LH	22	♂	107	90+76	30.5	No. 22 is bright enough to cause comment that a little duller than at height of breeding season. Mouth black. Top of head, nearer chestnut than Burnt Sienna (Pl. II, 9, l). Labials, near Maro Orange (Pl. II, 9, i).
	2LH	20	♂ ^{ok}	89	39+66	20	Killed, Oct. 30
	4RF	14	♂ [?] ♀	90	53+57	16.7	Killed, Oct. 30
	5LF						
	5LH	10	♂ [?]	75	145	12.5	Died Dec. 4, 1940
	5RH	2214	♂ [?] ♀	75	54+38	10.3	Killed, Oct. 30
	5RH	1	♂ ^{ok}	98	120	20.1	Killed, Oct. 30
	1RF						
	1RH	2	♂ [?]	95	57+67	13.4	Died Nov. 22, 1941
	3RF						
	1RH	13	♂ [?] ♀	91	52+46	12.8	Killed, Oct. 30

(See more notes of Oct. 29, on pp. 41, 42)

Oct 31. Last night I killed nos. 20, 14, 2214, 1, 13 in order to find their sex. Nos 1 and 20 turned out to be males, as I had guessed. Nos. 14, 13, 2214 all had been marked ♂? because even tho I had been able to probe where hemi-penes would be in males, they looked light in structure - especially head - as I figured females should be.

♂ No 20 Red head, Green tail
 ♂ " 1 Faintly pink labials, Green tail
 ♀ " 2214 Red head*, Red tail
 ♀ " 14 Faintly pink labials, Red tail
 ♀ " 13 Faintly pink labials, Green tail

* Not as red as no. 20, but pink labials and reddish sides of head and high on temporal regions.

Sexing by probing was unsuccessful. Some females could be probed deeper than some males. The depth probeable varied greatly even to opposite side of the same individual. Probe could be easily pushed back under from 2 to 6 ventral tail scales. (more on p. 42)

6 scales
 tip of vent.
 → patrinias



J. Rodgers - 1940

Eumeces gilberti

Oct 29. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

♂ No. 22, just weighed & measured. Evidently just completed shedding - fragment of old skin yet on tip of tail. No red on tail.

♂ No. 20, Head red but duller than no. 22. - Rather dull on back; probably has not shed recently. Tail with no trace of red.

♀ No. 14 Probing this lizard, I could probe a pocket about 5 mm. deep. However, the proportions of the head of this individual look like female to me. Head not red, tail red. Dark on back, as if not yet shed.

♂? No. 10 Probed about 7 mm. Slender head like female. ♂? One purple (blue purple) scale about 15 mm. from tip of tail. Shedding - much skin comes off as I handle it. No red Head. Red tail, especially ventrally. Oct. 30 pulled plug of wax out of right hemipenis.

♀ No. 2214 Probed only 5 mm. Reddish on sides of head. Red tail. Probably has not yet shed.

♂ No. 1 Top of head to nearer Light Brownish Olive than Isabella Color (Pl XXX, 19, "j"). Labials near Chamois (Pl XXX, 19, "h").* No red on tail. Probably not shed recently.

* slight suggestion of pink. Found dirt hardened in openings to hemipenes. Cleaning it off, I pulled a 10 mm. plug of light brown waxy substance out of the right left hemipenis. I painted it with iodine before returning the lizard to the cage. Oct. 30 - pulled plug out of right side.

Eumeces gilberti

Oct. 29 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

♂ No. 2 Probed hemipenis 7 mm. Head colored about as No. 1; Tail red.

♀ No. 13 No red head; no red tail.

Oct. 31. 4:50 pm. Yesterday afternoon about this time, I put 5 skinks, nos. 22, 10, 2, 1033, 1009 in a cage together. I had heaped the dirt (loam) at one end over a cardboard tunnel that was about 1" above the bottom of the aquarium, about 1 1/4" high, 8" deep, 5" wide at the back and with a 1" sq. opening. All the skinks went into the tunnel. There was about 3/16" of sand on its floor. To-day, at this time I found no. 10 buried in the sandy soil on top of the pile of dirt. This morning I noticed a furrow in the shallow soil at the other end of the cage, as if a skink had been trying to dig in.

Nov. 1 Last night when I put no. 10 into the tunnel, I probed enough dirt into the entrance of the tunnel to about half fill it. Up to this time the skinks had left the tunnel wide open. This morning enough more dirt had been pushed into the pile (from inside) to close it.

Nov. 3 The skinks came out today and closed the hole after themselves when they went back in. The first time they closed the hole they barely closed it. This time it was made thoroughly plugged.

Nov. 4 I opened the hole, took the skinks out, killed one of them (1009) and put them back in. I pushed enough

Eumeces gilberti

Nov. 4. Mrs. Vert. Zool., Univ. Calif., Berkeley, Calif.
dirt into the entrance to about half close it.

Nov. 5 Hole closed more thoroughly than ever. So much dirt has been pushed ^{into} ~~out of~~ the entrance from inside that a mound has been formed outside. This looks a little bit like they learned, but the fact probably is that they did not have enough sand on the cardboard floor of their tunnel to close the hole at first. Each time they have opened the hole, they have raked more sand into the tunnel from the pile I pushed into the entrance. They now have plenty of sand to fill the entrance by pushing it into the entrance from inside.

Dec. 3. The hole has been open for the past 3 weeks even though there was dirt in the entrance - there ~~was~~ was not enough inside to close it, however.

No. 22 probably had not just shed as suggested in notes, Oct 29, because it is just shedding now. Today I put in a new tunnel. The other one was wet. This time I separated it from the area where the plants are by a sheet of glass and put about 2 inches of coarse gravel under it. It is covered by 1-2 inches of light sandy soil. 5:20. They have been in the cage for about 1 1/2 hours, but do not seem to be satisfied to settle down inside the tunnel. They keep coming out & going in. No 10 tried to bury itself in insufficient light soil outside the

Eumeces gilberti

Dec. 3 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
cage. I placed 9 teaspoons full of dirt about
3 inches inside the mouth of the tunnel.

(No. 10 is a male - gonads 4 mm long and plump)
Dec. 4. No. 10 was found dead on the floor of the cage at
2:20 p.m. ~~to-day~~. It is plump and healthy looking. The
nearest I can figure is that I injured it yesterday or
the day before while trying to take it out of the old
tunnel with the forceps. It now weighs 14.8 grams;
78 + 144 mm long. The ventral side of the tail is
(lighter than Cameo Pink - Pl. XXXVI, 71, g)
pink, full length; very pale just back of the vent and
(Pale Lachia Pink - Pl. XXXVIII, 67, f)
purplish, toward the tip. It is Pale Rhodonite Pink
(Pl. XXXVIII, 71, f) half way back. The single (formerly
blue) scale, near the tip dorsally is Clear Green-Blue
Gray (Pl. XLVIII, 45, a). The dorsal side of the tail
is nearer Buffy Brown than Pl. XL, 14, i, on
the distal 1/3, blending in the middle 1/3 to a color
between ~~Pl~~ Citrine Drab (Pl. XL, 21, i) and
Grayish Olive (XLVI, 21, i). The back is slightly
more reddish than Light Brownish Olive (Pl. XXX, ~~18~~
18, k). Top of head slightly darker than ~~Wood Brown~~
Drab (Pl. XLVI, 17, h); labials between Pale
Vinous-Fawn and Light Vinous-Fawn
(Pl. XL, 13, e). Chin shields nearer white than
Pl. XXX, 23, g. Area ventral to ear, Marguerite
Yellow (Pl. XXX, 23, f) [this area posterior to chin shields]
Area on side of head ventral to ear opening Pale
Cinnamon-Pink (Pl. XXIX, 13, f). Belly Yellowish
Flavous (Pl. XLI, 25, f). Places on the pink part of

Eumeces gilberti

Dec. 4 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 the tail where it had apparently [and very likely, remembering my attempts to take it out of the tunnel the past two days] been bruised, I noticed a darker color. I found it not very difficult to scrape scales off with my finger nails, exposing a bright "orange" color - between Carnelian Red and Vinaceous-Rufous (Pl. XIV, 7; h). Judging by the ease with which I can scrape the scales off this lizard, it must have been about ready to shed.

Scales scraped off the back expose a bright green color (near Chartreuse yellow, then, soon, glass green, then Kildare Green [all Plate XXIV]) that, within two minutes exposure to the air, turns deep blue (Deep Delft Blue - Pl XLII, i $\frac{1}{2}$ or darker than Indigo Blue - Pl XXXIV, 47; m)

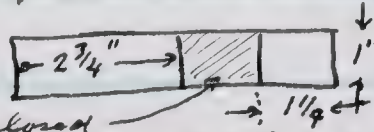
Scraping scales off of the labials does not expose any red, or even pink. It seems safe to speculate that, at the next molt, this lizard would have had a very red tail, but no red on the head. When the scales were scraped off of the dorsal side of the distal end of the tail the blue scale was still there and a little brighter.

The color change occurs about as fast as one would expect it to in the course of drying. Many scales were picked off with no visible abrasive injury to the scales exposed. They changed just the same. Scraping the scales off of

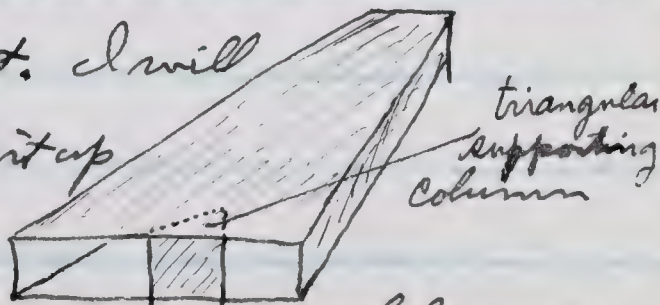
Eumeces gilberti

Dec. 4 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
the belly exposes light green scales with yellow centers. This soon turns bright green, then blue-green, then blue; eventually as dark as the back. An area freshly exposed, dried with a match turned to the dark blue within 30 seconds or less.

Dec. 7. On the evening of Dec. 5 I put 15 or 20 heaping teaspoons full of dirt into the tunnel. On the morning of Dec. 6 the entire entrance was closed. In the late afternoon (about 3:30) I noticed that there was a hole where a skink has stuck its head out but had not come out. At 5:30 the hole had been closed and the pile of dirt closing the entrance had been reinforced all along. This was evident by pieces of shed skin that were sticking through the dirt along the top of the entrance. The skin was not showing at 3:30. The presence of the skin may (in fact probably) indicate that they are running short of dirt inside, and are having to scrape the floor rather thoroughly to get enough to close the entrance. The entrance of this tunnel consists of two holes



at the back than at the front. I will either have to build the dirt up in front, or keep them supplied with dirt to plug the entrance with, because they push it out to open it, and it slides down an incline.





Summary of data on growth of captive Emmees gilberti gilberti

Dec. 19, 1941
Mus. Vert. Zool., Berkeley
J. Rodgers

Snout-to-vent length (in mm.)

E. g.
gilberti

specimens. 1

Sept. 11, 1938	Mar. 3, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940	Dec. 19, 1941
100	99	100	100	98	Killed Oct. 30, 1940
83	83	85	96	95	Died Nov. 22, 1941
63	64	67	68	Died May 6, 1940	
61	61				
62	65	66	71	75	Died Dec. 4, 1940
89	91	91	88	91	Killed Oct. 30, 1940
88	87	88	90	90	Killed Oct. 30, 1940
87	87	89	93	89?	Killed Oct. 30, 1940
72	74	76	75	Died before Feb. 28, 1940	
101	101	103	103	107	110

Died April 30, 1942
No growth since Dec.

Bradgers

Mus. Vert. Zool., Berkeley

Dec. 19, 1941

Summary of data on growth of captive Eumeces g. gilberti

Tail length (in mm.)

<u>E. g.</u> <u>Gilberti</u>	Sept. 11, 1938	Mar. 3, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940	Dec. 19, 1941
1	59 + 61	58 + 60	60 + 59	60 + 60	120	
2	56 + 60	56 + 60	57 + 61	59 + 64	57 + 67	
6	84 + 14	83 + 14	90 + 15	92 + 18		
7	105 tail compl.	106				
10	119 tail compl.	120	126	134	145	
13	76 + 54 $\left\{ \begin{array}{l} \text{took off 75 mm.} \\ \text{(119.) of tail -} \\ \text{tail formerly complete} \end{array} \right\}$	50 + 30	52 + 39	57 + 64	52 + 46	
14	153 $\left\{ \begin{array}{l} \text{took off 105 mm. (182 g.)} \\ \text{of tail - tail formerly} \\ \text{complete} \end{array} \right\}$	47 + 38	53 + 48	53 + 56	53 + 57	
20	35 + 47	36 + 49	41 + 61	40 + 62	39 + 66	
21	35 + 31	44 + 35	48 + 51	48 + 54		
22	93 + 71	93 + 71	87 + 72	86 + 72	90 + 76	87 + 79

→ Died April 30, 1942
no growth since Dec.

J. Raagers
 Mus. Vert. Zool., Berkeley
 Dec 19, 1941

Summary of data on growth of captive specimens of E. gilberti

Weight (in grams)

<u>E. g.</u> <u>gilberti</u>		Weight (in grams)					
		Sept. 11, 1938	Mar. 3, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940	Dec. 19, 1941
1	♂	20.9	19.7	20.1	20.6	20.1	Killed Oct. 30, 1940
2		9.7	9.55	14.1	15.0	13.4	Died Nov. 22, 1941
6		5.1	5.0	7.2	8.1	Died May 6, 1940	
7		4.7	4.7				
10		4.75	5.6	8.6	10.3	12.5	Died Dec. 4, 1940
13	♀	12.8	11.6	12.6	13.8	12.8	Killed Oct. 30, 1940
14	♀	14.0	12.4	16.1	16.8	16.7	ditto
20	♂	13.1	14.6	20.6	20.6	20.0	ditto
21		6.55	8.4	10.0	11.1	Died before Feb. 28, 1940	
22		26.2	28.2	27.0	25.1	30.5	39.1

Died April 30, 1942
 No growth since Dec.

Eumeces g. gilberti

Jan. 19 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 Color description, from Ridgway, of no 2834, a
 skink from Stockton - an intermediate between
E. g. g. and E. g. cancellatus. From live (?) specimen under chloroform.

Light vertebral area of ground color.

between Tawney-Olive and Saccardo's Umber;

Pl. XXIX, 17, j.

Dorsolateral light lines.

Pale Yellow-Orange; Pl. III, 15, f.

Lateral stripes.

Pale Orange-Yellow; Pl. III, 17, f.

Greenish and bluish tinge in dorsolateral light areas
 of original part of tail, and bluish tinge on ventral
 surface of regenerated part of tail.

Measurements of freshly killed specimen

Snout-vent 58.8 mm; tail 15.5 + 29. mm.

See

Mar. 17 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 See Itinerary of Sacramento Valley trip, Mar 6-9, pp. 203 A-D.

For several weeks I have noticed no. 22 gasping or
 "smacking its lips". To-day I notice that it is
 just completing shedding; its head is bright red and
 its body bright green. The tail has not yet shed, but
 will no doubt also be bright green.

~~Mar~~ April 29. No. 22 is thinner and apparently sicker. It
 probably won't live much longer.

Eumeces g. gilberti

April 29 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Notes on specimens collected 1 mi. E Clements, San Joaquin Co., Feb. 22, (T.R. 2919 + 2920). Tail of 2919 was blue, only slightly grayed. No. 2920 was faintly greenish yellow-brown dorsally and very light ventrally - no pink on any part. The tails of these specimens were broken upon capture and the pieces were carried in the bag with the animals. Parts could have been ^{lost} but probably were not. One of these was found under a fence post in a pasture, and the other was found in a pile of bricks that was completely overgrown with grass. Notes on specimens collected 1 mi. N Lodi, San Joaquin Co., Feb. 22: Color records of freshly killed specimens. Dorsal side of brightest tail of young (T.R. 2940) between Light Methyl Blue and Methyl Blue (Pl. VIII, 47a). Dorsal lines between Pinkish Buff and Cinnamon-Buff (Pl. XXIX, 17", c). Another very small one (T.R. 2941) has the blue quite faded; more so than found in skiltonianus of same age. One larger one (T.R. 2943) has scattered blue spots on dorsal surface of distal $\frac{1}{3}$ of tail. Ventral surface of tail pinkish; where the color is concentrated enough to be keyed, it is Carrot Red (Pl. XIV, 7'b). Another, larger one (T.R. 2944) has a similar wash on the ventral surface of the proximal $\frac{2}{3}$ of tail, but distal $\frac{1}{3}$ has been regenerated, and is much brighter (between Carrot Red and Rufous - Pl. XIV 8', a). Another, of similar size, (T.R. 2945) with similarly regenerated tail has no pink on tail. All have greenish

Eumeces g. gilberti

April 29 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
bellies - young very faintly so - adults light but distinctly green. Backs of adults are bronzy (no green); sides greenish down low, where the dorsal color blends with belly color.

April 30 No. 22 was found dead in the cage this morning. It is the last of the group sent to me by Kenry Fitch in 1938. After stiffening, it measures 101 mm. from snout to vent and the tail measures 82 + 69 mm. This, of course, can not be compared with measurements made on the specimen while alive. The animal has showed signs of losing weight and being sick since December or January, and has probably not grown during that time.

cancellosus
Emmeces g. rubricaudatus

Jan. 20 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

1036 has been out on top of the ground for past 2+ weeks and has ~~be~~ appeared very sick. It is very thin thru the pelvic region, and the region of the hemi-penis is swollen. The swelling over the right hemi-penis has a purple spot on it - as if bruised. I will kill this lizard now and inject it with 95% alcohol.

Feb. 1 - 979 - see p. 37 - gilberti.

Feb. 7 - 979 still unable to handle a meal worm.

Mar. 7 - 979 - see p. 38 - gilberti

Mar. 31 - see no. 2532

Oct. 10 - 4 skinks were out at once to-day -

nos 22, 14 and one other small one have red tails. The largest skink in the cage does not have a red tail. These 4 were all in the same cage.

Oct. 29 Following are weights and measurements of individuals still in captivity

Markings	Number	Sex	Snout-vent length (mm.)	Tail length (mm.)	Weight grams	
1 LH	1033	♀	92	93 + 4	11.2	
24 LF	1009	♀	85	104	14.5	Killed Nov 4, 1940

June 26 - , p. 170B in Itinerary etc.

Oct. 17, 1941 979 must have died soon after Mar. 7, 1940 ^{died Aug 17, 1940 - see note then (p. 39)}

Nov. 22, 1941 No 2 (sep. 40) died (see also p. 1, 10, 11, 22, 34,

Tail reddish ventrally, and some reddish, on distal 1/3, dorsally.

J. Rodgers - 1941

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cancellosus
Eumeces g. rubricaudatus

Oct. 15 Mus. Vert. Zool., Univ. Calif. Berkeley, Alameda Co., Calif.
1033 died to-day.

Dec. 19 No. 22 is now 110 mm from snout to
vent, it weighs 39.1 grams and the
tail is 87 mm to end of original part and
79 mm more to tip.

J. Rodgers
 Mrs. Hart. Zool., Berkeley

Summary of data on growth of captive specimens of E. g. cancellatus

Dec. 19, 1941

Snout-to-vent length (in mm.)

<u>E. g.</u> <u>cancellatus</u>	Sept. 9, 1938	Mar. 31, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940
979	82	85	86	81	Died Aug. 7, 1940
981	51	54	Died about Sept. 10, 1939 (see note Sept. 14)		
1009	84	85	85	86	85 Killed Nov. 4, 1940
1010	80	80	81		
1033	88	90	89	90	92 Died Oct. 15, 1941
1034	92	92	90		
1036	63	63	70	70	

J. Rodgers
Mrs. Vert. Zool., Berkeley

Dec. 19, 1941

Summary of data on captive specimens of Emmex g. cancellus

Tail length (in mm.)

<u>E. g.</u> <u>cancellus</u>	Sept. 9, 1938	Mar. 31, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940
979	91	91	29 + 62	27 + 55	
981	61	72			
1009	100	100	100	101	104
1010	59	63 + 27	60 + 31		
	{ Sept. 10 - took off 6 mm. of tail (leaving 48 mm.) tail formerly complete				
1033	139	147	90 + 12	93 + 20	93 + 4
1034	71	72	61 + 15		
1036	71	83	68 + 27	68 + 29	

J. Rodgers
 Mrs. Vert. Zool., Berkeley
 Dec. 19, 1941

Summary of data on growth of captive Eumeces g. cancellatus

Weight (in grams)

<u>E. g.</u> <u>cancellatus</u>	Sept. 9, 1938	Mar. 31, 1939	Sept. 14, 1939	Dec. 11, 1939	Oct. 29, 1940
979	14.75	16.7	18.2	15.1	Died Aug. 17, 1940
981	3.3	4.2	Died about Sept. 10, 1939 (see note Sept. 14)		
1009	12.25	14.1	14.4	14.2	14.5 Killed Nov. 4, 1940
1010	9.5	10.9	12.0		
1033	11.75	12.7	13.0	14.2	11.2 Died Oct. 15, 1941
1034	14.8	14.4	14.6		
1036	4.25	5.8	9.7	7.4	

Eumeces g. cancellatus

Mar. 18. Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
About Feb. 14, Phil Merritt brought two skinks to me, that he had collected Feb. 8, 5 mi. S Brentwood, Contra Costa Co., Calif. I put them in a terrarium with 1 large C. g. gilberti^(no. 22), 1 whiptail, and one Sceloporus. They have been out of the retreat often and have eaten meal worms. Today the one with the stubbiest tail continually chased the other one. It ate many meal worms, was willing to fight it out (tip & war) with the whiptail for ~~one~~ a meal worm and usually retained any it had picked up even tho the whiptail tugged and grabbed at it several times. It did not give the other skink enough rest to allow it to eat any meal worms. It bit at the others head, but most often at the tail $\frac{1}{3}$ to $\frac{1}{2}$ way from tip. These two specimens are entered in my catalogue as 3230 and 3231. 3230 is the one with the stubbiest tail.

J. Rodgers - 1940

9

Eumeces skiltonianus

Mar. 20 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
My no. 2486, collected Mar. 17, 1940, Marsh Cr., 1000 ft.,
4.1 mi. ESE Mt. Diablo, Contra Costa Co., Calif.

Color Records by Ridgway:

Wide vertebral area, nearest to Dresden Brown
(Pl. XV, 17, k), but faintly lighter and faintly
more yellow. This is probably one of the
lightest brown *skiltonianus* I have seen.

Dorsolateral lines, [tan] slightly grayer than
Maize Yellow (Pl. IV, 19, f).

Tail [rusty orange] Bitter-sweet Orange
(Pl. II, 9 d) (but slightly lighter and
slightly brown) ventrally and Orange
Rufous (Pl. II, 11, i) dorsally. This color
does not completely cover the dorsal surface
of the tail. It is of different density at different
parts, tending to concentrate
dorsolaterally. Parts of the dorsal part of
the tail are brown, but the general superficial
impression is that the whole tail of this
animal is "red." The distal $\frac{1}{3}$ is grayer.
The "red" of the tail blends in with the back
over the hind legs.

One large adult (2503, 2504, 2505, 2506, 2507, or 2508), collected
3.7 mi. SE Mt. Diablo (in the head of Tassajara Cr.) has a
stubby regenerated tail, but still has a
noticeable wash of blue on it.

See this species also in L. Cal. J. & M. acc. pp. 1572, Mar 2, 1940

Eumeces skiltonianus

Sept. 15 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 Color record, from Ridgway, of a brightly colored young skink collected at the forks of Waddell Creek, Santa Cruz County, Calif., Sept. 14, 1941, by Alden H. Miller. Tail between Amparo Blue and Bradley's Blue (Pl. IX, 51, a); dorsolateral lines light ochraceous buff (Pl. XV, 15, b).

¹⁹⁴² Mar. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 See Itinerary of Sacramento Valley trip, Mar. 6-9, p. 203, A-D.

¹⁹⁴² April 28 Four specimens collected by Walt Dalquest, on the Big Sur River, April 25. A young male (WWD 3026) has a bright blue tail, buffy stripes, and no pink on tail or labials. A large male (WWD 3025; gonads, ) has a blue tail, and bright orange along the labials and below - no pink on tail. A large female (WWD 3024) has large eggs () blue on dorsal surface of remaining $\frac{1}{3}$ or $\frac{1}{2}$ of tail, no pink on tail, and only a light tinge of pink on the labials. This pink, found on the labials of females and young or non-breeding season males is probably independent of the bright orange and red orange found on breeding males. A large male (WWD 3023) has smaller gonads than males taken in the Berkeley hills ^{April 19} last Sunday () but it has much more bright orange on it. The orange completely covers the labials and ventral surface between them, and extends back about half way to the fore leg. On the ventral surface of the tail, it covers the entire surface from anterior to the vent, blends with the

Eumeces skiltonianus

Mar. 16 Mus. Vert. Zool., Univ. Calif., Berkeley, Alam. Co., Calif.

Records of tail color of skinks from Berkeley Hills.

Date of collection	Original no.	Sketch of gonads	Color of ventral surface	other notes
Mar. 1, 1942	W.W. Dalquest 2826		pink	all with some blue
" " "	W.W.D. 2823		"	
" " "	W.W.D. 2830		no pink	
" " "	W.W.D. 2829		pink	
" " "	W.W.D. 2828		no pink	
" 15 "	W.W.D. 2881	 snout-vent. 60mm.	pink (faint)	trace of blue
" " "	W.W.D. 2882		no pink	faint blue gray on dorsal of stub
" " "	W.W.D. 2883		pink	"
" " "	W.W.D. 2885		pink	faint blue gray dorsal 1/2
" " "	W.W.D. 2886	 snout-vent 56mm.	pink	short stub no blue
" " "	W.W.D. 2889	 snout-vent - 56.5mm	no pink	blue
" " "	W.W.D. 2890		pink (faint)	blue
" " "	W.W.D. 2891		pink	faint blue gray dist. 1/2
" " "	W.W.D. 2892	 snout-vent - 59mm.	no pink	gray - only a few specks of blue
" " "	W.W.D. 2893		no pink	short stub
" " "	W.W.D. 2894		pink (faint)	faint bluish gray distal 1/2
" " "	W.W.D. 2895		pink	scattered small specks of blue
" 22 "	W.W.D. 2900		pink	short stub
" " "	W.W.D. 2901		trace of pink	gray blue
" " "	W.W.D. 2902		pink	no blue
" " "	W.W.D. 2903	 57.2mm	pink (faint)	very small specks of blue
" " "	W.W.D. 2904	 52.9mm		blue gray
" " "	W.W.D. 2905	 58.5mm	pink (faint)	stub only
" " "	W.W.D. 2906	 58.1		bright blue
" " "	W.W.D. 2907		pink	stub only
				gray blue

J. Rodgers - 1942

Eumeces skiltonianus

Mar 25 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Records of tail color of skinks from Berkeley Hills

Date of collection	original no.	sketch of gonads	color of ventral surface	other notes
	WWD	59.9mm		
Mar. 22, 1942	2908		pink	light blue
" " "	WWD		pink	blue gray
" " "	2909			
" " "	WWD		no pink	short reg. tail, no blue
" " "	2910			
" " "	WWD		pink	light blue
" " "	2911			short reg. tail
" " "	WWD		no pink	no blue
" 29 "	2912		maybe faint trace	
" " "	2923		off pink	blue gray
" " "	WWD			no blue; short
" " "	2924		pink	regenerated tail
" " "	WWD			no blue
" " "	2925		no pink	regenerated tail
" " "	WWD			
" " "	2922		pink	
April 12	WWD		much orange-pink on vent side of tail and on lips and	→ sides of throat, back 3/8" post. to ear opening. no blue
" " "	2931			"
" " "	WWD		"	"
" " "	2932		"	"
" " "	WWD		"	"
" " "	2933		same, but slightly less: bluish gray on dorsal side of regens. distal half.	
" " "	WWD		faint pink tinge on vent side of tail very faint trace on labials	
" " "	2934			(no blue)
" " "	WWD		"	" (gray-blue on distal 1/2)
" " "	2935		"	" (gray-blue on distal 1/2)
" " "	WWD		"	"
" " "	2936		most faint on tail and no pink on labials	(blue on distal 1/2)
" " "	WWD		much orange on labials and sides of throat; entire vent. side of tail and hind leg	
" 14 "	T.R.		few scattered blue-gray spots dorsally	
" " "	3232		orange on labials and sides of throat, prox. 1/2 of vent side of tail, much blue on tail; dorsally and ventrally.	
" " "	T.R.		same as 3234 but less orange	
" " "	3234			
" " "	T.R.		orange on labials but none on tail.	
" " "	3236		blue on tail	
" " "	T.R.		very pale pink on labials and vent. side of tail. light gray blue tail	
" " "	3233		faint tinge of orange ventrally about 1/3 of way but tail - distal edge of blue.	
" " "	T.R.		bright blue tail	
" " "	3235		light wash of orange on proximal 1/3 ventrally.	
" " "	T.R.		bright blue tail	
" " "	3237		very pale pink on labials and vent. side of tail	
" " "	WWD		gray blue tail	
" " "	2949		"	"
" " "	WWD		"	"
" " "	2951			
" " "	WWD		only short stub of tail remains	
" " "	2952			

Emmeces skiltonianus

mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Records of tail color and gonad size of skinks from Berkeley hills.

Date of collection	original no.	sketch of gonads	color of ventral surface	other notes
April 14, 1942	WWD		light tinge of salmon	very pale pink on labials
" " "	2948		light tinge of pink	"
" " "	WWD			
" " "	2950			
" " "	WWD			orange labials;
" " "	2953		no pink on tail	" extends back of + vent to angle of jaw
" " "	WWD		"	"
" " "	2954			moreso
" " "	WWD			"
" " "	2955		orange on tail	moreso
" " "	WWD		bright orange on whole vent. surf. of tail. - few specks	"
" " "	2956		orange on labials + anal tail	wash of blue gray dorsally only short stub of tail remaining
" 18 "	WWD			blue at distal end of long stub
" " "	2969			no pink on labials
" " "	WWD			no blue - short stub + reg. tip.
" " "	2970			no pink on labials
" " "	WWD		no pink	no blue; labials reg. tail
" " "	2971			"
" " "	WWD		no pink	"
" " "	2972		faint pink	blue
" " "	WWD			"
" " "	2973		faint pink	"
" " "	WWD			short stub
" " "	2974		no pink	no blue;
" " "	WWD			reg. tail
" " "	2975		faint pink	no blue; reg. tail
" " "	WWD			some red specks dorsally
" " "	2976		pale orange	"
" " "	WWD			blue
" 19 "	Viola Memmler		no pink	blue on dist. end of long stub, dorsally.
" " "	128			much orange
" " "	Viola Memmler		much orange	no pink
" " "	129			blue
" " "	Viola Memmler		faint pink	reg. part
" " "	130			no pink on labials
" " "	T. R.		no pink	blue
" " "	3248			some orange, confined to labials
" " "	T. R.			blue
" " "	3249			bright orange on labials
" " "	T. R.			gray
" " "	3250			no pink
" " "	T. R.			blue
" " "	3251			blue
" " "	T. R.		light wash of pink	reg. part + only. "
" " "	3252			"
" " "	T. R.			"
" " "	3253			no blue
" " "	T. R.			blue
" " "	3254			blue
" " "	WWD			"
" " "	2990		no pink	blue
" " "	WWD			blue
" " "	2991			blue

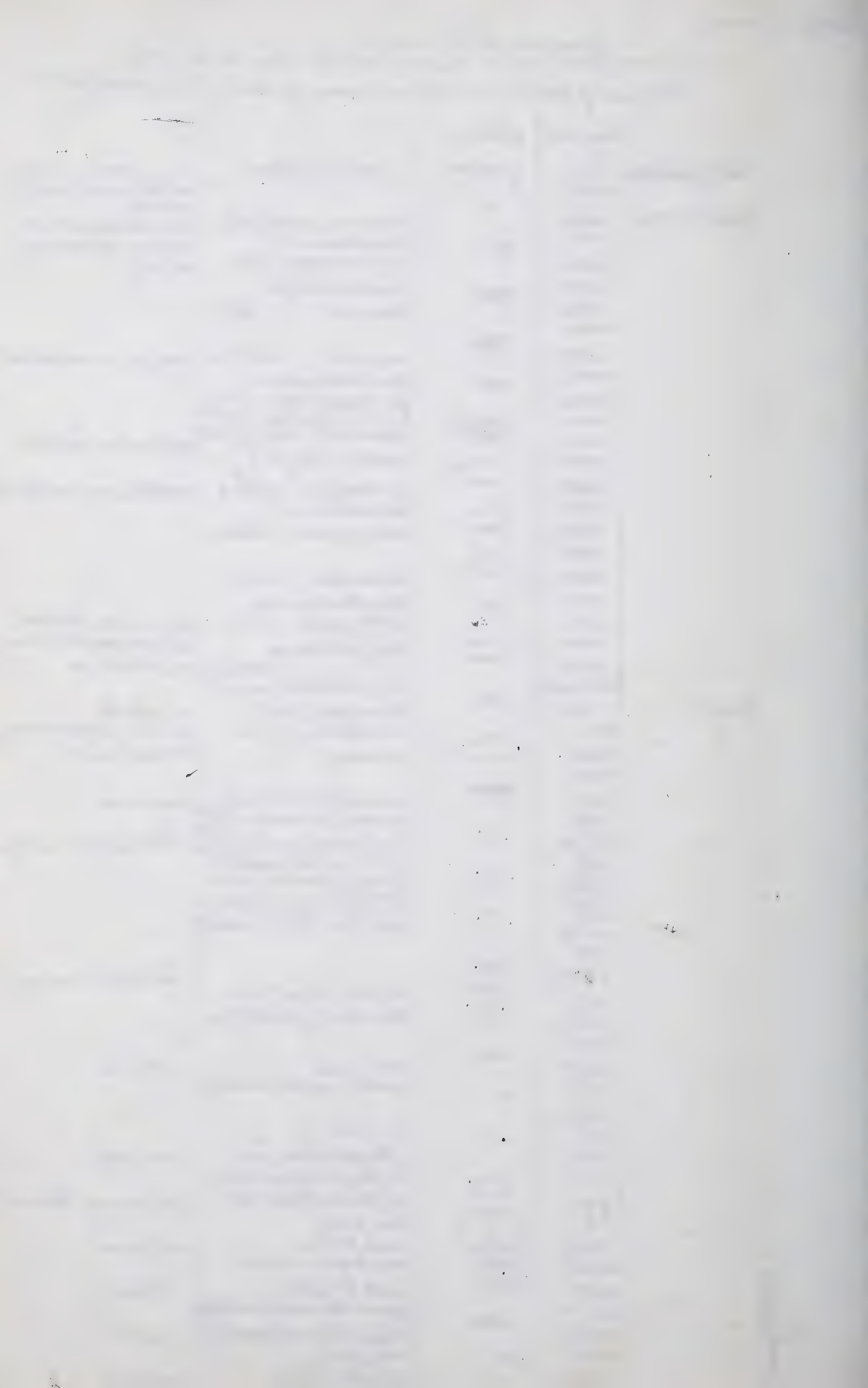
✓ same as formerly recorded as very pale pink on labials

J. Rogers - 1942

Eumeces skiltonianus
Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Records of tail color and gonad size of skinks from Berkeley hills

Date of collection	original no.	sketch of gonads	color of tail	other notes
April 19, 1942	2992 WWD		lavender medially: blue	slight pink at angle of mouth
" " "	2993 WWD		lavender & some pink ventrally: blue	no pink on labials
" " "	2994 WWD		medium bright orange: blue	slight pink at angle of mouth
" " "	2995 WWD		no pink: no blue	"
" " "	2996 WWD		lavender and some pink ventrally: blue	no pink on labial
" " "	2997 WWD		much of tail regenerated some pink: blue toward tip	"
" " "	2998 WWD		medium bright orange: blue	no pink on labials
" " "	2999 WWD		lavender and some pink: blue	reddish orange on labials
" " "	3000 WWD		lavender: blue	"
" " "	3001 WWD		lavender and very little pink: blue	"
" " "	3002 WWD		bright orange: no blue	no pink on labials
May 3, "	Viola Memmler 142 T.R.		blue gray tail no blue; much orange	bright reddish orange on labials +
" " "	3260 T.R.		no pink on (orange)	no pink
" " "	3261 F.R. WWD		blue gray tail	much reddish orange on labials +
" 6 "	3088 F.R. WWD		much blue; no pink pinkish anteriorly + [bright blue]	no pink
" " "	3089 F.R. WWD		lavender otherwise ventrally pink 1/2 way back ventrally & lavender for post 1/2; blue dorsally	labials pale orange
" " "	3090 T.R.		bright orange ventrally gray blue distal 1/2 dorsally	"
" " "	3272 T.R.		"	"
" " "	3270 T.R.		no pink on tail, blue gray dorsally for distal 2/3	labials orange
" " "	3267 T.R.		no pink faintly pinkish ventrally	"
" " "	3269 T.R.		no pink	no pink
" " "	3268 T.R.		bright blue tail no pink on ventral side of short stub of tail	no pink
" " "	3271 T.R.		no pink	pale orange labials
" " "	3266 WWD		no blue no pink - short stub of tail	no pink
" " "	3085 WWD		some lavender ventrally	no pink
" " "	3087 WWD		bright blue dorsally	no pink
" " "	3086 WWD		no pink bright blue	no pink

Cont. on p. 16

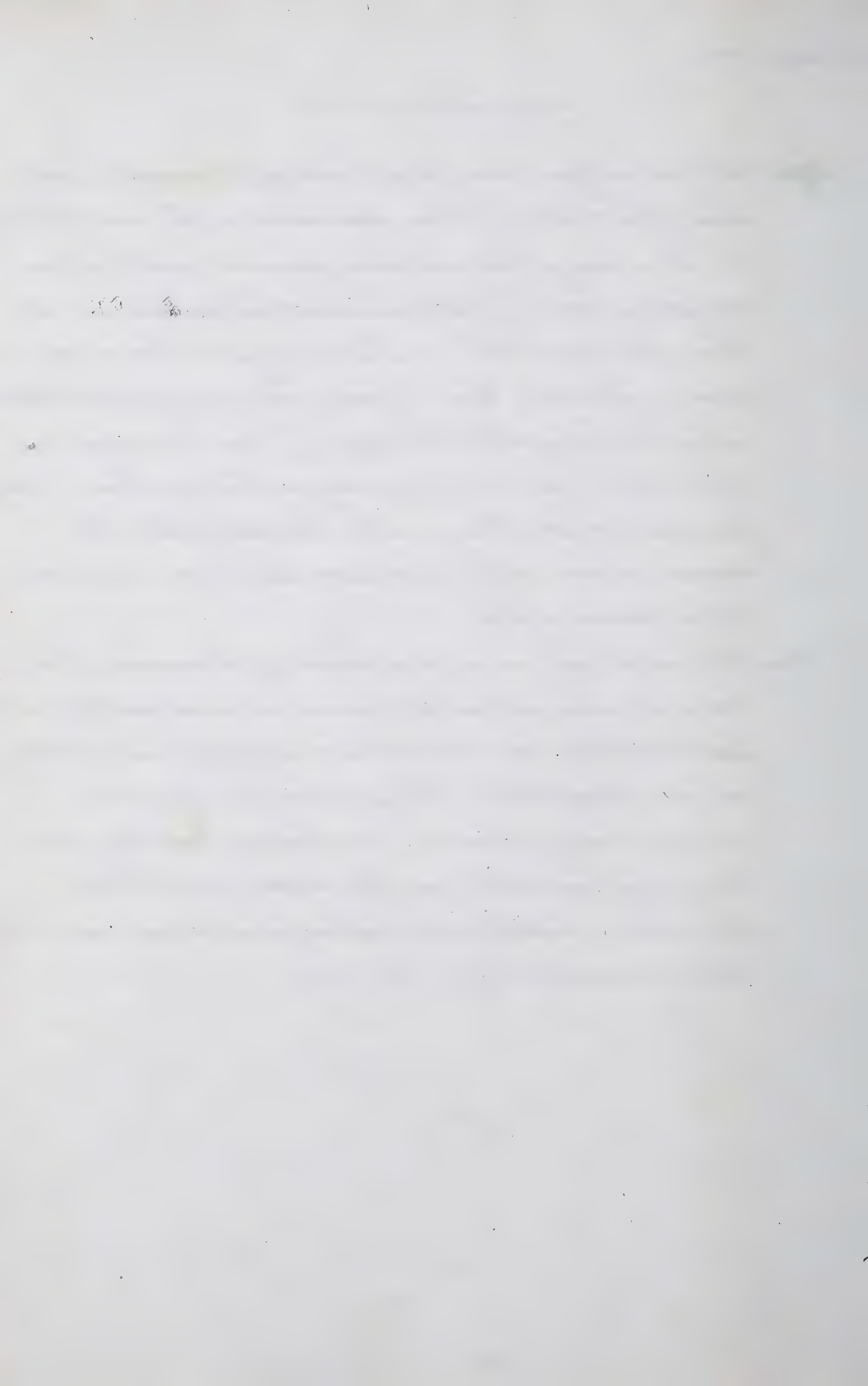


J. Rodgers - 1942

Eumeces skiltonianus

April 28 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
blue of the distal $\frac{1}{4}$ thru lavender in the next-to-distal $\frac{1}{4}$. The orange also extends around onto the dorsal surface, covering all the area of the tail that is not blue - the proximal $\frac{1}{4}$. The orange on this male is more extensive than on any males so far collected in the Berkeley Hills (this spring), and the eggs in the female (WWD 3024) are much larger than in any female so far taken in the Berkeley Hills. The season down at Big Sur is evidently much ahead of the season here.

May 11 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Four skinks, judged to be mature and possibly gravid, that Walt Dalquest collected near Grizzly Peak yesterday are being kept alive. They are each in separate compartments of terraria. It is hoped that they will lay eggs and data can be obtained as to time required for hatching, etc. These four skinks are in his catalogue as 3113, 3114, 3115, 3116.



J. Rodgers-1942

Emmeces skiltonianus

mus. Vert. Zool., Univ. Calif., Berkeley Alameda Co., Calif.

Records of tail & labial color and gonad size of skinks from Berkeley Hills.

Date of collection	original	sketch of	color of tail	other notes
	no.	gonads		
May 10, 1942	WWD		bright orange ventrally	bright orange
	3108		some gray blue dorsally; stub	labials +.
	WWD		no pink; some blue	orange on
	3109		dorsally; stub (about 1/3)	labials
4 specimens (WWD 3113, 3114, 3115, 3116), judged to be adults & possibly gravid females taken on this date are being kept alive in terraria in my office - T.R.				
May 24, 1942	Viola Memmler		gray blue dorsally	
	144		pink ventrally	no pink on labials
" " "	V. Memmler			
" " "	145		no pink - blue	pink tinge on labials *
" " "	146			
" " "	T.R. 3285		no pink - blue gray	no pink on labials
" " "	J. Gray		" " - gray blue	" "
" " "	T.R. 3286			
" " "	J. Gray		pale pink - blue	" "
" " "	T.R. 3287			
" " "	J. Gray		no pink - "	" "
" " "	T.R. 3288			
" " "	J. Gray		pink - blue	faint pink on labials *
" " "	T.R. 3289			
" " "	J. Gray		" "	no " " " "
" " "	T.R. 3290			
" " "	S.F. Cook, Jr.		no "	" " " " "
" " "	T.R. 3291			
" " "	S.F. Cook, Jr.		" "	" " " " "
" " "	T.R. 3292			
" " "	S.F. Cook, Jr.		" "	" " " " "
" " "	T.R. 3293			
" " "	S.F. Cook, Jr.			
" " "	T.R. 3302			
" " "	J. Failla		pink ventrally - stub	much pink on labials
" " "	T.R. 3303			
" " "	J. Failla		no pink - almost all regenerated	pink on "
" " "	T.R. 3304		" " " " " "	much orange on "
" " "	T. Rodgers			
" " "	T.R.			
" " "	3305			faint pink on labials
" " "	T.R.			orange-
" " "	3306		orange-pink ventrally	pink on labials
" " "	T.R.			
" " "	3307		pale pink ventrally	faint pink on labials
" " "	S.F. Cook, Jr.		" "	" " " " "
June 7	T.R. 3317		no pink; no blue	orange labials and
	M.H.		2/3 regenerated	a little below & behind them
	T.R. 3318		no pink; no blue	"
	M.H.		7/8 gone (very short stub)	
" " "	T.R. 3319		tail pink ventrally -	no pink on labials
" " "	M.H.		see note p. 18; no blue	
" " "	T.R. 3320		faint orange ventrally;	faint pink on some labials
" " "	M.H.		bright blue	
" " "	T.R. 3321		bright orange &	medium bright orange on
" " "	M.H.		blue	labials extending post. & ventrally back from angle

2 specimens left in alc. sev. days before notes made.



Eumeces skiltonianus

mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Records of tail and labial color and gonad size in skinks from Berkeley Hills

Date of collection	original number	sketch of gonads	color of tail	other notes
June 7, 1942	T.R. 3322 MH		bright orange on vent. surf., incl. reg. part. Reg. part blue dorsally.	orange labials
" " "	T.R. 3323 M.H.		bright orange on whole vent. surface; gray dorsally	dull pinkish labials
" " "	T.R. 3324 W.W.D.		some orange on vent. surface of stub; no blue	no pink or orange
" " "	T.R. 3325 W.W.D.		orange on subvent. vent. surf. except reg. tip - it is blue; dorsally gray-blue	orange on anterior and lower labials.
" " "	T.R. 3326 W.W.D.		orange prox. & blue dist. on vent. surface; dorsally bright blue	no pink or orange on labials
" " "	T.R. 3327 W.W.D.		faint pink prox. blue on most of vent. surface; bright blue dorsally	orange anteriorly on labials
" " "	T.R. 3328 J.F.		pink prox. half blue dist. half ventrally; dorsally blue	no pink or orange on labials
" " "	T.R. 3329		faint pink anterior prox. half, blue dist. half & dorsally	" " "
" " "	T.R. 3330 P.D.		"	" " "
" " "	T.R. 3331 P.D.		no pink; blue dist. half vent. & blue dorsally	" " "
" " "	T.R. 3332		"	" " "
" " "	T.R. 3333	at least 4, nearly ready to hatch	no pink; some blue distally ventrally, none dorsally	" " "
" 21 "	T.R. 3349 J. Failla		short stub; no pink on tail	" " "
" " "	T.R. 3350 R. Storer		no pink; no blue	much pink on labials. faintly back to ear
" " "	T.R. 3351		no pink; blue gray	faint pink on labials
" " "	T.R. 3352		faint pink; gray blue	no pink or orange on labials
" " "	T.R. 3353		much orange vent. & some dorsally; blue	" " "
" " "	T.R. 3354		pink ventrally; blue	" " "
" " "	T.R. 3355		short stub	" " "
" " "	T.R. 3356	kept alive	pink ventrally; light gray-blue - stub nearly broken	" " "
July 19	T.R. 3411		medium bright orange on vent. side original part of tail.	Labials light orange
" 21	T.R. 3413		pink on ventral surface	was with eggs; killed within week.
" 25	T.R. 3414		blue-gray above	no pink?
Aug 9	T.R. 3416		pink on vent. surface	was with young; killed within week.
" 23	T.R. 3431		blue-gray above on reg. part	no pink?
" " "	T.R. 3432		"	no pink
" " "	T.R. 3433		no pink	no pink
" " "	T.R. 3434		"	no pink

Cont. on p. 44



Eumeces skiltonianus

June 7 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Bright red-orange labials have been noted to be consistently more reddish than the bright orange coloration that develops especially on the ventral surface of the tail. Some individuals have been noted to have pale pink on the ventral side of the tail or on the labials or both (?). A particularly good example of this pink coloration is the ventral surface of the tail of T.R. 3319. Just a little lighter than Shrimp Pink (Pl. I, 5, f). An example of the brightest labial color is (brightest parts of T.R. 3317) Bittersweet Orange (Pl. II, 9, b); duller yet dark parts are Apricot Orange (Pl. XIV, 11'). The brightest orange on the undersides of the tail of T.R. 3321 is Salmon Orange (Pl. II, 11, b); duller parts are Apricot Buff (Pl. XIV, 11' b). The orange on the tail and labials of specimens collected now is not as bright or as extensive as it was on specimens collected a month ago.

On June 7 and on May 24, six of us were out for about three hours (each day), between 7 and 10 a.m. May 24 we got two rattlesnakes; June 7 we got 1 young yellow bellied racer. These are the only snakes we got. On trips during the month or 6 weeks before we nearly always got three or four snakes per 3-4 hrs. of collecting and they included king snakes, ring-necked snakes, sharp-tailed snakes, ^{gopher snakes,} garter snakes, racers, and rattlesnakes. Snakes seem to be scarcer now.



Eumeces skiltonianus

June 23 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 On June 21, Jan McTaggart Cowan, Robert Storer, Milton Hildebrand, Viola Memmler, Joe Marshall, Janet Failla and I collected skinks (Joe spent most of his time trying to collect a Grasshopper Sparrow with his sling shot) 1/2 mi. SE Bald Peak, 1700 ft., Contra Costa Co., Calif. We collected from 8:20 to 9:00 am. and got 18 skinks (see nos. 3339-3356 - my numbers). There were many Sceloporus out, but we saw no other reptiles. Janet Failla saw what was probably a young gopher snake. The only conclusion I can so far draw as to where to look for skinks is the following: Shallow hollows and swales on hillsides and ridges, under scattered rocks.

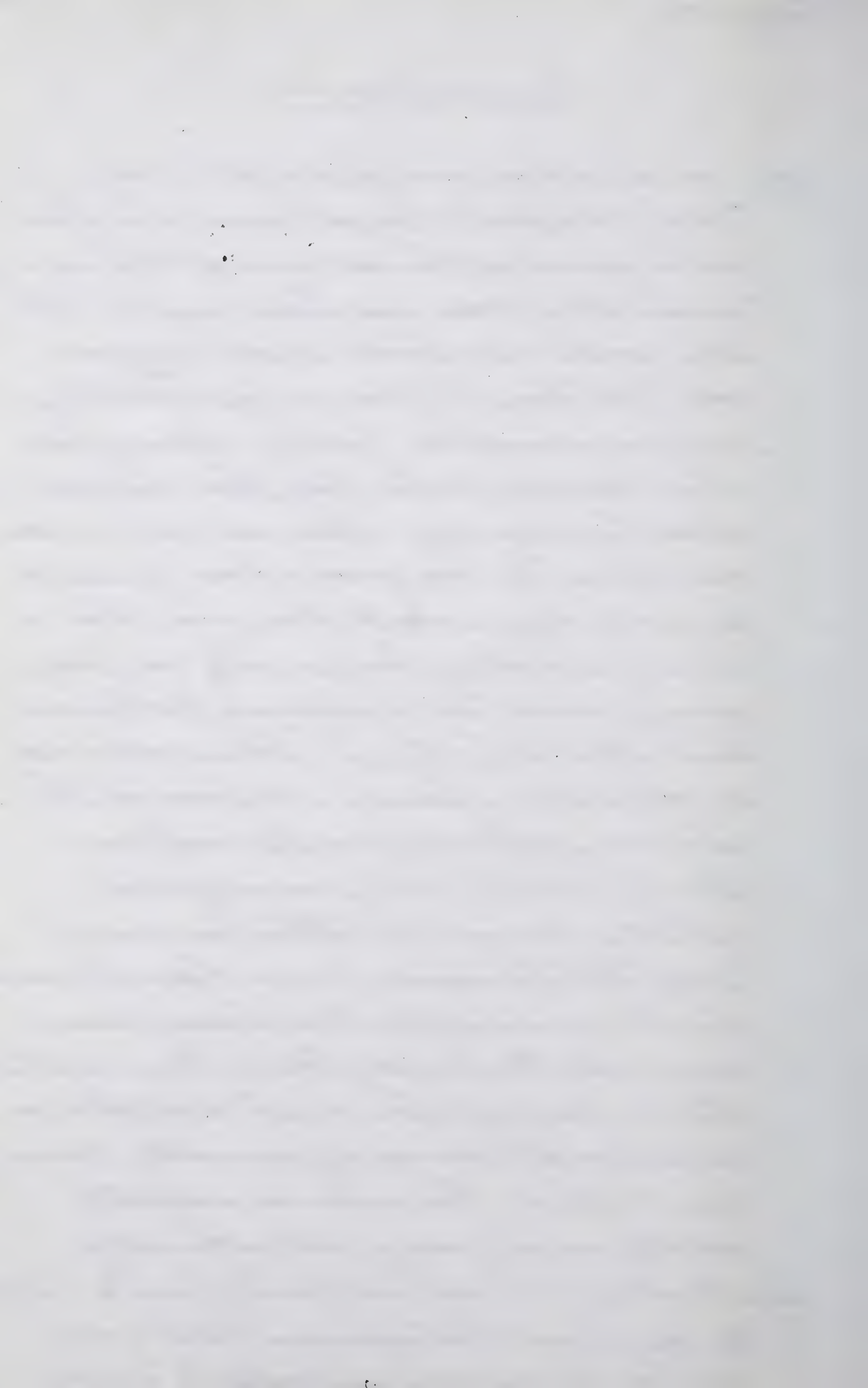
Some places were probably caused by slippage on the hillside. These hollows are often anywhere along the hillside but seem to often be near the top. Others, along are below rock outcrops. This probably does not mean that these places are frequented by the skinks, but probably that they are most accessible there. Other places the skinks can go on down under other rocks, can move ahead under other rocks, or the rocks cannot be moved. Cowan saw a C. lateralis and a dead C. mormon near the new cyclotron yesterday.



Eumeces skiltonianus

July 5. 2 mi. SE Balabear, 1000-1100 ft., Contra Costa Co., Calif.
 Alden Miller, Ian McTaggart Cowan, Bob Storey and I arrived at the east end of the Broadway tunnel at 6:15 am. and hiked up the hill to the south of a point about 200 yards east of the tunnel. When we got ^{near} the top, we found ourselves facing a strong cold wind and a dense fog that whipped across the ridge and obscured all vision more than 50 - ~~100~~⁷⁵ yards ahead of us. We found many rocks to turn over, but in 2 hrs. of searching, found only one (large young) skink, two Sceloporus, two Aneides, and about 6 Triturus. The weather was so cold that our hands were numb. The fog was collecting on the rocks and plants (and us) and running down, collecting around the bottom (and us as well). Large steel transmission towers had streams of water running from their bases, running down over the concrete blocks to which the steel is anchored. The one skink collected was under a rock that was approximately 10" across and 2 1/2" thick. The rock was completely isolated on a grassy flat on the ridge.

July 8 Mrs. Vert. Zool., Univ. Calif., Berk., Alam. Co., Calif.
 On page 16, note that 4 specimens (W.W. Dalgness, 3113, 3114, 3115, 3116) were judged to be gravid



Eumeces skiltonianus

July 8 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
females, and kept in captivity for further study (They are
also mentioned on p. 15). ^(Aquaria) Two terraria, one 12" x 24"
and the other 10" x 16" were divided, each into two
compartments, by sheets of glass. ~~They were filled~~
about two inches of sand was put on their floors,
about an inch of loam on top of that and
about an inch of heavier soil on top of that.
The grass on the soil was cut to about 1/2" long.
A hollow about 1" deep was made in some part
of each, and this covered by a slab of pine
bark 2"-3" wide and 4"-6" long and about 1/2"
thick. All four skinks chose these places for
hiding for the first few weeks. Each compartment
was equipped with a small water dish, sunk
in the ground. Early in June ~~some of~~ they
began to dig down deeper. Each day as I
looked to see if eggs had been laid, I would
find one or two of them missing from the hollow
I had fixed and would have to dig deep to
find it. One of them especially (3113) insisted
on digging down deep (From the start I have
thrown meal worms into the terraria & several
times skinks have been seen to eat them.)
Another one also showed particular interest in
digging down deep but I lost track of
which one it was before I rearranged the
terraria. It became obvious that if I was to

J. Rodgers - 1942

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Eumeces skiltonianus

July 8 (cont) Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
observe the eggs in place, I would have to devise some sort of contraption that could be opened up.
June 20, 22, 23 I made up such a contraption.
The following sketch gives a general idea of a unit - for one skink. Five such units were made; 2, 12" x 12"; 2, 8" x 10"; 1, (in a round jar) 6" in diam.

Soil layer on top of each quarter of the unit

spaces between units actually narrower than in this sketch -

$\frac{7}{8}$ " x $\frac{1}{2}$ " strip to hold soil on top of bottom board

Nails by means of which quarters of the unit can be lifted for examination of the soil layer below.

$\frac{7}{8}$ " board for insulation and to soak up any surplus water that might be poured on top & run down thru

$\frac{1}{4}$ " to $\frac{7}{8}$ " layer of light sandy loam
[Part of one top quarter cut away to show lower layer of dirt.]

hole to allow skink access to soil below

Units like this were made for the aquaria used before (p. 19), two for each, and one for algal or mayonnaise packer. The soil on top is occasionally sprinkled with water, taking care not to let much water (or no water)

Eumeces skiltonianus

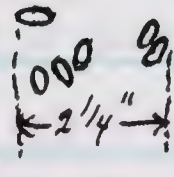
July 8 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
run freely down thru the cracks to the lower parts. An averaged about 2 meal worms a day have been thrown into ~~the~~ each unit. There are no water dishes on these observation units.

On June 23, a bulging female (TR 3356) was put in the mayonnaise jar unit. 3356 has shed since she was put in, as evidenced by many scales lining scattered throughout the tunnels and cavities made by her. I did not notice them peeling from her body. I did notice them peeling from the body of ~~3116~~ 3116; it is free of loose scales to-day and many scales are scattered throughout the tunnels and cavities and on top. 3114 and 3115 have not shed. On July 1, it was first noted that 3113 had a lumpy appearance as well as being generally bulged. July 6, 3114 was noted to have several lobes to her bulge. To-day (1:10 p.m.) I found five eggs with 3113 in a space hollowed out by her in the southwest corner of her cage. As I raised the quarter of the unit, she hesitated about two seconds, as if deciding which way to go, then moved under the next compartment to the east. One egg is much smaller than the rest. I will measure them next time I look at them, rather than bother her

3113
first
laid

Eumeces skiltonianus

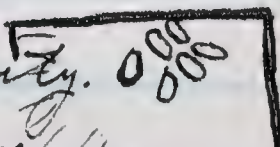
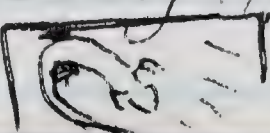
July 8 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
more to-day. [This is no. 3113 and her nest, no. 1.]

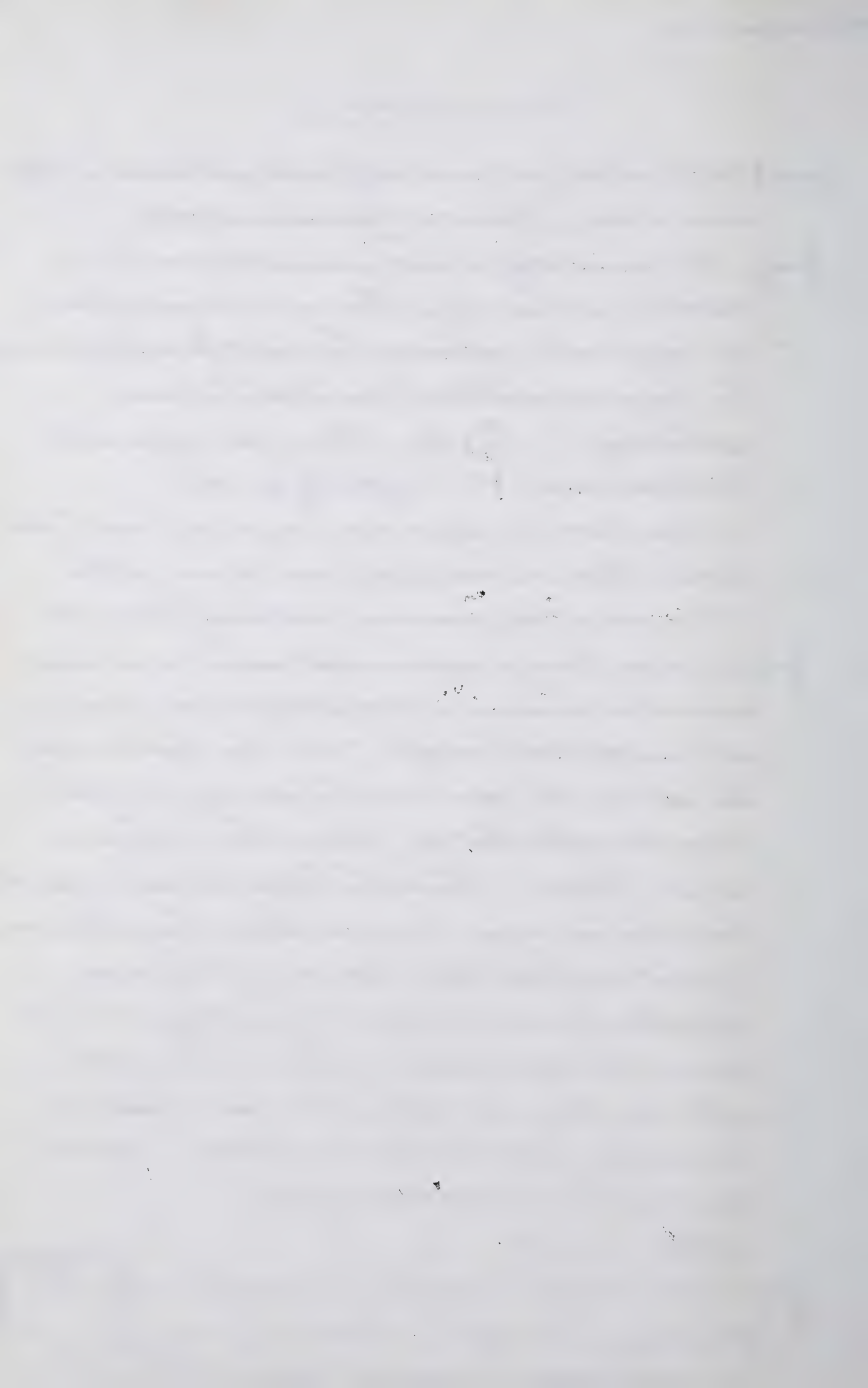
July 9, 8:45 a.m., 6 eggs in nest^{no. 1} now, all seem to be about the same size. Female did not leave the eggs as I exposed the nest for about 40 sec. The eggs are scattered (much as they were yesterday); . One of the eggs is white, the others are faintly pinkish.

5:00 p.m. Now 7 eggs; one is grayish and more translucent than others. It is unlike any of the others were this morning; certainly the new one.

July 10 8:45 a.m. Only 6 eggs in nest now. I scratched around in the sand but didn't find one buried as I suspected I might. 3113 has looked very thin since she ~~she~~ laid the first eggs. In fact, I began to notice that she looked thin in the pelvic region (above & between the bulges) a week before she laid the first eggs. Today she looks thinner than ever. I do not think she has been out of the nest chamber since she laid the first eggs. I have been in the room much of the time, and have not seen her out; also, she has kept all runways from the chamber closed. I opened one once and she closed it again.

5:30 p.m. 6 eggs.

July 11 9:00 a.m. 6 eggs in completely closed off cavity. 
The parent, 3113, in closed-off cavity 
in southeast corner of cage



Eumeces skiltonianus

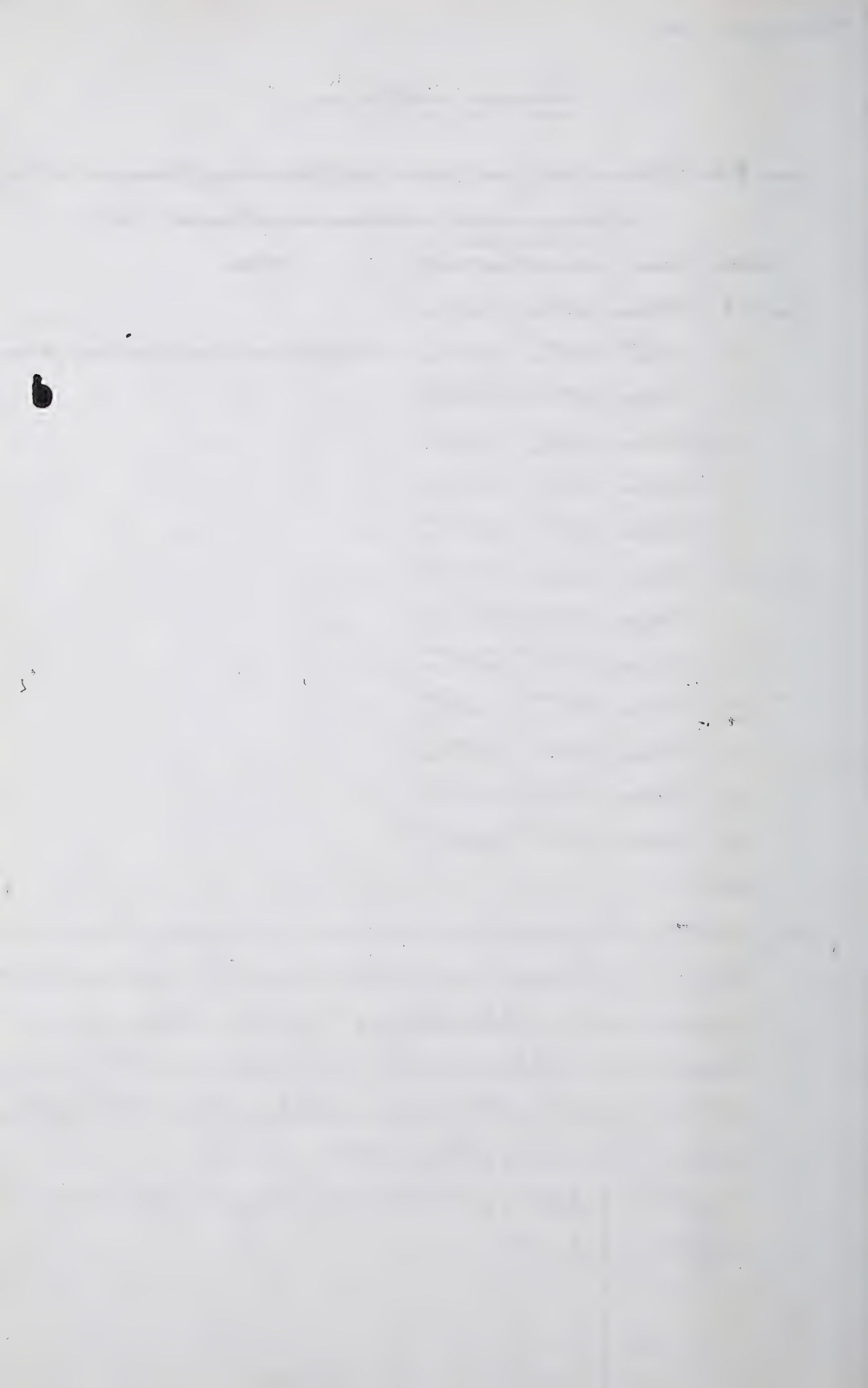
July 9 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Temperature data on skink nest (no. 1)

Date	Time	Air Temp. above nest	Temp. in nest cavity	Notes
July 8	2:45 p.m.	24°C	22.5°C	
" 9	10:15 ^{a.m.} ~~p.m.~~	20°C	18.5°C	1 hr. after nest cavity had been opened ^(see p. 24)
" "	5:00 p.m.	24.5°C	25.5°C	
" 10	8:45 a.m.	20°C	19.5°C	
" "	5:30 p.m.	20°C	25°C	
" 11	9:00 a.m.	20°C	19.5°C	
" 13	9:30 a.m.	20°C	19.5°C	
" "	2:40 p.m.	24.5°C	24°C	
" "	5:20 p.m.	23.5°C	24.5°C	
" 14	9:30 a.m.	21°C	20°C	
" "	5:30 p.m.	23.5°C	25°C	
" 15	9:20 a.m.	20.5°C	20°C	
" 16	9:20 a.m.	21.5°C	20.5°C	
~~17~~				

Sept. 10 Temperatures have ranged from 17° to 23°C almost continuously since last recorded on this chart. There has never been more than 1.5° difference below & above ground and usually the difference has been less than .5°

The next notes on temperature of Sept. 11, p. 43.



Erneus skiltonianus

July 11 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alam. Co., Calif.
 3115 first laid No. 3115 has laid one egg in a cavity under the NW corner of the SE quarter of her cage. This will be referred to as nest no. 2.

July 12 9:30 p.m. 3113 is back with eggs.

July 13 9:30 a.m. 3113 left the eggs and the nest cavity when I lifted the cover. She left thru a tunnel that was open. This is the first time I have observed the nest cavity when it was not entirely closed off. I caught her and returned her to the nest cavity.

There is still only one egg with 3115.

5:20 p.m. No change in number of eggs; both 3113 & 3114 with eggs.

July 14 (a.m.) 3113 in NE corner of her cage (under NE quarter).

3115 still has only one egg. She has been with it each time I have looked since it was laid.

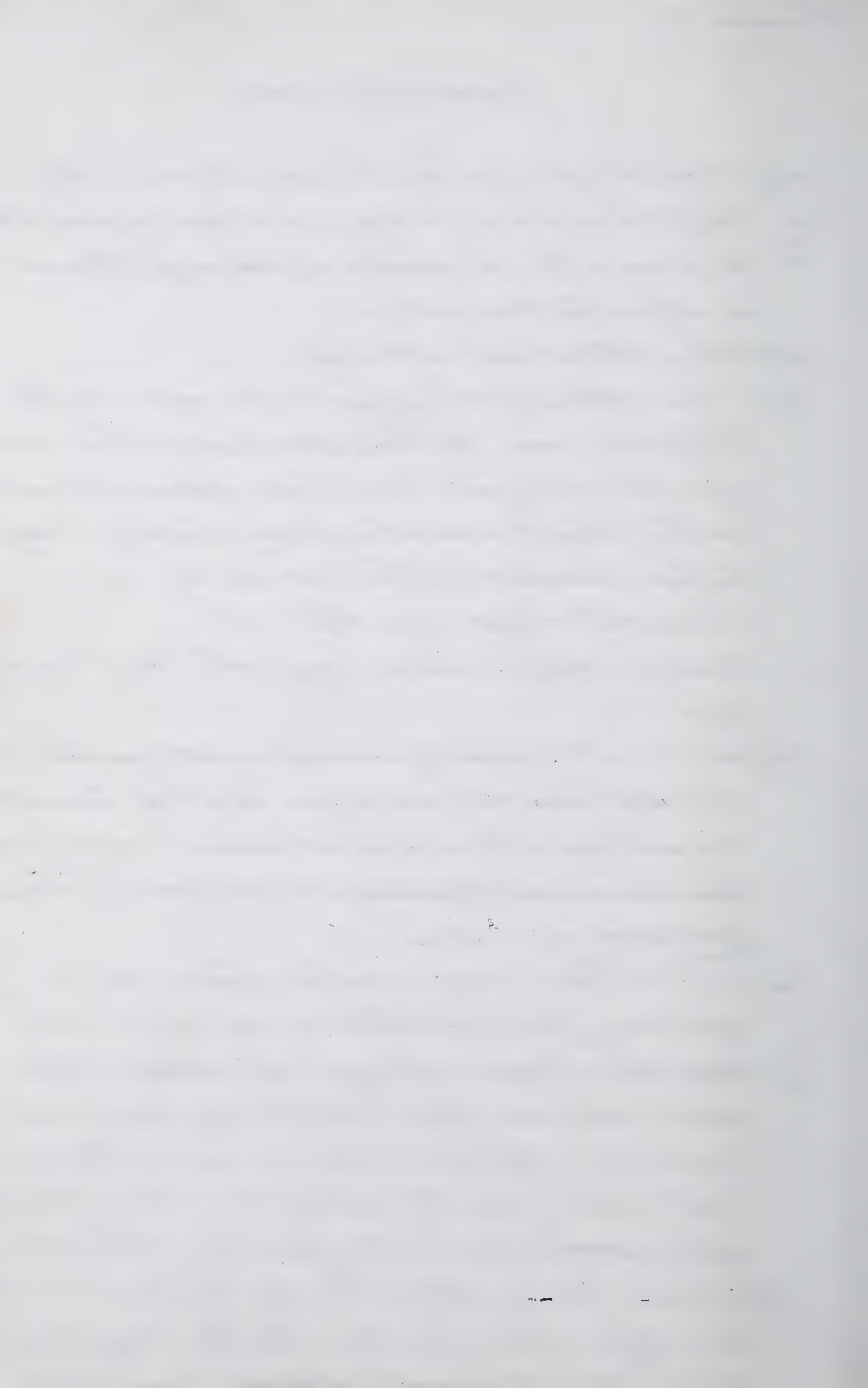
~~She was out on top yesterday~~ No. 3116 was out on top yesterday afternoon.

July 15 3114 laid 5 eggs some time since 5:30 p.m.

3114 first laid

yesterday, thus establishing nest no. 3. 3113 ~~and 3115~~ stayed with eggs as I ~~examined~~ lifted cover to see nest. 3115 left its egg and came up on top. I put 3115 back down the entrance. Nest no 3 (skink no. 3114) is in the north side of the ~~south~~ northeast quarter of the nest.

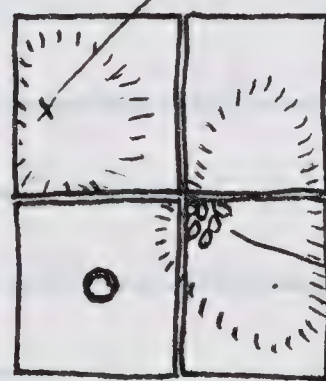
July 16 9:00 a.m. No. 3115 still with single egg. No. 3113 with its 6 eggs. The chamber where the 5 eggs of no. 3114 were first found, yesterday, is empty and



Eumeces skiltonianus

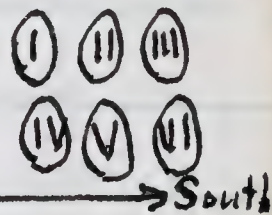
July 16, 9:00 am. (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alam. Co., Calif.
 completely closed off. The egg, and one more - now 6,
 are now in the NE corner of the SW quarter of the
 cage, in a large chamber. Yesterday was the first
 time this nest was disturbed. Apparently the disturbance
 caused 3114 to move her eggs
 to a new place. Measurements

- | | |
|-------------------|-------------------------|
| 1. 13.4 X 7.8 mm. | } of eggs of
nest #3 |
| 2. 12.4 X 7.9 mm. | |
| 3. 13.1 X 8.1 mm. | |
| 4. 12.4 X 7.7 mm. | |
| 5. 13.0 X 7.9 mm. | |
| 6. 13.7 X 7.8 mm. | |



→ South
 position, July 16,
 9:00 am.

Eggs numbered with roman numerals (india ink) on both sides —, longitudinally on one side and transversally on the other and placed back into same part of nest. Female herded back to egg chamber and nest closed.



2:00 Eggs of nest no 3 moved 2 1/2" to the SW; now under center of SW quarter of cage with dirt piled up between eggs as if pushed up as eggs were pushed together. Eggs numbered in ink had that side up; others had neither numbered side up. Female was coiled around eggs, left them as nest was exposed, but was herded back 10 min. later.

July 19 3114 moved her eggs to the SE. quarter of the cage. In hollowing out a place for them, she scraped out all

Eumeces skiltonianus

July 19 (cont) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
the dirt so that they rest directly on the wooden floor.
~~the~~ The eggs are scattered about like .

July 20 To-day, I measured the eggs of nest no. 1, for the first time. They are 12 days old to-day, and are darker than they were a week ago. They measured 11.8×7.4 mm., 12.2×7.5 mm., 12.3×7.9 mm., 12.7×7.9 mm., 13.0×7.5 mm., 13.3×6.8 mm.; average 12.55×7.33 . The 1 day old eggs of nest no 3 averaged 13.0×7.86 . The egg of nest no. 1 either started smaller or has shrunk.

Yesterday (July 19) Walt Dalquest and I went to the southern part of San Pablo Ridge (2 mi. SE Bald Peak). When we arrived (about 9:15 am. there was a dense fog, ^{nearly} as dense as described for the same place July 5, but not as cold. We parked on the old tunnel road about 200 yards south of the east end of the tunnel and hiked in an easterly direction to the top of the ridge, hitting it at the point, ~~the~~ farthest south, of our walk down the ridge on July 5. On the way up, we turned over many rocks and usually found the ground very dry & widely cracked underneath. In several places we dug down a foot or so but found only more dry ground. About three fourths of the way up the hill, we dug out under a small rock outcrop, finally moving four or five rocks that averaged 14"

Emmea skiltonianus

July 20 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley Alameda Co., Calif.
in diameter and many small ones. Altogether, we moved about two yards of dirt & rocks, opened a hole about four feet wide and ten feet long that went back in from the surface about three feet at the deepest place. $1\frac{1}{2}$ to 2 feet under the surface, we found damp soil. We found half a dozen tarantulas ^(a kept) tunnels, one smooth tarantula (Brachathelgia), three or four Jerusalem crickets (Stenopelmatus), four or five centipedes (brownish ones - not the big yellow green ones), several beetles, a cache of seeds (probably pocket mouse), some burrows (about $\frac{1}{2}$ " in diameter) that could have been made by shrikes, but no shrikes. At the top of the ridge, just about 100 yards south of the power lines and 50 feet north of the point where an old road reaches the ridge from the west, around a large rock outcrop, we found conditions that seem worth further investigation. The rocks were all damp, but not dripping as they were on July 5. (It was not as cold or quite as windy as on July 5). We dug down into the talus, close to the outcropping rocks and found ~~that~~ a mixture of light, soft, moist dirt and rock fragments extending down deep alongside. This material seems to have collected in a

Eumeces skiltonianus

July 20, ^(cont.) 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
pocket that are formed alongside of the outcropping rocks. The pocket probably formed by slipping away of the soil around, by erosion of the soil around the outcrop, or by receding of the outcrop itself then erosion. A combination of the first and last, with the second playing some part seems probable. Although it seems unlikely that much slippage has taken place in the hill here since it is mostly shale clear to the surface, not with a thick top layer of soil as noted on hillsides where slippage commonly takes place in these hills. Although we found no skinks in this place, it seemed to us like a good place for them and an easy place to dig. We found one adult male skink about 75 yards NW of the point just west of the power lines and within 30 feet of the top of the ridge. It was under a rock that was about 4" x 5" x 8", and part of a cluster of rocks of that size & smaller.

The fact that the eggs of nest no. 1 have probably shrunk suggest that these nests are being kept too dry. This is supported by the fact that the egg in nest no. 2 had a dent in the side of it two days ago when it was very dry but appears normal now and by the fact that, tho we found no nests in the hills

Eumeces skiltonianus

July 20 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 yesterday, we did find moist ground that would be available to skinks there. Also, egg no. 14 of nest no. 3 had a dent in its side this morning. I added much more water to the cages this morning. In nest no. 2, some water ^{soaked ~~off~~ very little} flowed in on the floor under the eggs, otherwise none touched the eggs.

As I handled the eggs of nest no. 1, I dropped several about 1/4 inch as I put them in a Syracuse dish. They dented on the end, but the dent popped back out after about 10 seconds.

The skink collected July 19 ^{is} #3411 ♀

July 21 Nest no. 4 (first nest found in field). Was 10" below surface in loose dirt among rocks. Exact situation could not be described, because it was broken up by pick and 2 eggs broken. The remaining six eggs measured as follows:
 12.8 X 9.7 mm, 11.9 X 8.9 mm, 12.5 X 8.6 mm, 12.5 X 8.9 mm, 11.3 X 8.7 mm, 10.6 X 7.8 mm. Grassy clearing, gently sloping south, within 2 feet of sparsely outcropping rocks (each with an area 6" to 10" X 8" to 14" sticking up 3" to 8"). About ~~4~~ 4 ft. south of Umbellularia clump lined with poison oak. 1/2 mi. SW Bald Peak.

Next no 5 July 25 Nest no. 5. Found on west slope of San Pablo ridge, about 100 feet from ridge, 1/4 mi. N Bald Peak. After about one hour of picking, a hole about 4' by 6', by 2' deep was opened in the hillside,

Eumeces skiltonianus

July 25 Nest no. 5 (cont.) (Found on grassy slope of west side of San Pablo Ridge about 100' from top) and the uphill side was being broken down with a pick. Breaking it down involved picking out the larger rocks, then picking down the remaining dirt and rocks. As I broke away some dirt and rocks a large skink ran out. I caught her and at the same time noticed some eggs (5). The eggs were partly covered by fine soil that had almost certainly sifted in while I was digging. The eggs were ^{on} in such light soil that covered a rock floor. The layer being about $\frac{1}{2}$ " thick. They were lying at what was then (result of my picking) the mouth of a tunnel about 30 mm in diameter that sloped up at about a 15° angle along a rock floor and a rock wall on one side. The tunnel extended only 20 cm. The large rock that, when removed, exposed the nest was within 10-30 mm of the eggs, and projected out of the ground about 30 mm on the uphill side and 300 mm on the downhill side. It was one of the 25 or 30 rocks that marked the outcrop and attracted me to the spot to start digging. The ^{exposed} parts of the other rocks were from 15 to 35 cm. in diameter and projected 5 to 30 cm. above the surface. This outcrop was concealed by grass from an observer ⁵⁰⁻¹⁰⁰ feet away. A $50 \pm$ gram sample

J. Rodgers-1942

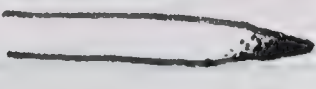
33

Eumeces skiltonianus

July 25 Nest no 5 (cont.) (W. slope of San Pablo Ridge).
of soil from around the eggs (under the eggs, not
loose stuff that had fallen in) contained 9.5%
water. by weight; i.e. water = 9.5% of water + soil.
The eggs in this nest measured as follows:
16.1 X 10.5 mm, 15.4 X 10.9 mm, 15.6 X 11.1 mm, 15.6 X 10.7 mm,
16.1 X 10.9 mm.

Aug. 10 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
Yesterday John Davis, Janet Failla and I went out
at 8:00 - 10:30 am looking for skinks we hiked
along the ridge on the west side of Grizzly Peak
Boulevard and turned over many rocks
without success. Many of these rocks had not
been turned over before. We finally had some
success on the south-facing grassy slope
about 200 yards north of the 1600 ft. bench
mark near the rock retaining wall and
culvert on G. P. Blvd. This was about 100 yds
south of the location of nest no. 4 (see July 21,
p. 31) and roughly 1/2 mi. SW Bald Peak.
At this point John and I each dug out an
immature skink and I dug out an adult with
5 young. I had dug out a hollow in the hill
and was working up-hill picking down the
bank. The ground here, like most of the ground
in these hills, is a mixture of light sandy soil
and rocks. I picked some of these rocks
and dirt loose from the bank and a large

Eumeces skiltonianus

Aug. 10 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
 skink ran out of a small hole about 4" below
 the surface and ran down into the ^{yellow} hole I had
 dug. It was immediately followed by three
 small skinks. We caught all 4, accidentally
 killing two of the young. The adult bit my
 hand and refused to let go until I forcefully
 removed her about ~~minus~~ 30 seconds later.
 We then dug into the hole and got two more
 young skinks. Making, altogether, 5 young and
 1 adult. The hole these skinks were in was
 about 1" in diameter and ran back into the bank
 (made by me and dug) ^(this will be ref. to as nest No. 6) about 4". It was immedi-
 ately under a rock that was about 4" thick and
 that whose upper surface projected above ground
 about 1/2". The young skinks were very delicate,
 their viscera showed clearly thru their pale gray
 bellies and the ~~new~~ scar of the umbilicus
 remained. ~~The tail was~~ Color remarks on live
 specimens: Tail between Salvia Blue (Pl IX,
 49 b) and Light Methyl Blue (Pl VIII, 47 b).
 Dorsolateral lines Maize yellow (Pl. IV, 19 f.);
 Buff. yellow (Pl. IV, 19 d) anteriorly. Lateral
 lines Maize yellow. Sprinkling of brown
 along median part of dorsal area; otherwise
 black between dorsolateral lines and on sides.
 Tip of tail black: 

nest. no 6

Eumeces skiltonianus

Aug 10 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Measurements of 3 young skinks collected Aug. 9,
nest no. 6
~~lot~~ numbers 3417, 3418, 3420, 3421, 3422, follow:

	snout-vent length	tail length	
measured	28.5 mm	39.1 mm	tail complete when measured; 4 mm broken off after
alive	28.9 mm	21.1 mm stub	T.R. 3420
	29.0 mm	16.0 mm stub	
	29.6 mm	39.1 mm	tail complete. T.R. 3418
	29.2 mm	39.2 mm	head smashed tail complete T.R. 3417

The two young skinks that were killed as they were collected (T.R. 3417, 3418) had stomachs full of yolk; one of them had some dirt (soil) scattered along through the oesophagus.

All eggs on hand were measured yesterday (Aug. 9).

Nest No. 1 16.1 X 9.5 mm Nest No. 2. 14.0 X 8.6 mm

17.1 X 8.5 mm

15.3 X 8.8 mm

15.8 X 9.5 mm

15.2 X 9.2 mm

13.2 X 8.7 mm

Nest No. 3. I 15.9 X 9.6 mm

II 14.8 X 9.9 mm

III 15.4 X 9.8 mm

IV 14.3 X 9.4 mm

V 14.9 X 9.3 mm

VI 15.6 X 9.9 mm

Nest No. 5 15.2 X 9.5 mm

14.1 X 9.4 mm

14.1 X 9.1 mm

14.6 X 8.9 mm

14.5 X 9.6 mm

Eumeces skiltonianus

Aug 12 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

Ever since the young skinks and the parent of nest no. 6 have been in captivity, the young have been wandering to all corners of the cage. Although one or two of them have occasionally been found within two or three inches of the parent, they have usually been scattered to more distant parts. They have been seen on top often and also under the edge of the lowest board. The parent has been quiet, has not moved about much and has not shown the young any attention that I have observed. One young (now 3420) was found dead in the nest cage this morning. The gut was found to contain a wad of dirt, together with some yolk; the stomach contained dirt.

Aug 15 Yesterday, we noted that the eggs in nest no 5 were in a damper situation than where they were found, so opened up $\frac{1}{4}$ of the cage exposing the eggs. During the night the female pulled them back under another part of the covering and piled dirt up so as to "seal" them in. They shrunk some during the night. She may have been trying to get them in where they would be in more humid air and they may have dried too much as result of exposure to air even tho soil was more moist than in situation where they were found.

Eumeces skiltonianus

Aug. 17 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
The last two remaining young of nest no. 6 (see p. 228), nos. 3421 and 3422 were found two compartments over (at the other end of the aquarium). One was dead and had a big hole eaten out of the side of its head (now 3421). The other was alive, but I killed it and the parent (3419).

This morning, ^{at 9:00 o'clock,} instead of nest no. five eggs in nest no. 5, I found 4 young skinks and the shells of two eggs I could not find the fifth young anywhere in the aquarium, though one of the egg shells could have been a spoiled and crushed egg. 11:45 am. I opened the stomach of the parent and found one egg shell and one complete egg. She apparently ate the egg that didn't hatch. These young may have been hatched any time since Sat. noon and this morning. Two of the young have pieces of membrane, on which dirt has gathered hanging onto the umbilicus. The other two have distinct round brown spots (one each) where the umbilicus has pulled free. They must have been hatched within the last 24 hours. This also leads to the conclusion that the young of nest no. 6 were more than 24 hours old, since the mark where the umbilicus was torn loose, on those of no. 6, was only a faint groove. These four young lizards + an embryo taken out of the unhatched egg that was taken from the stomach of the ♀.

J. Rodgers - 1942

Erneca skiltonianus

Aug. 17 Mus. Vert. Zool., Univ. Calif., Berkeley, Alam. Co., Calif.
are given the following numbers: 3424, 3425, 3426,
3427, 3428 (embryos). Investigation of the embryo
shows it to be nearly fully developed. The scales
of the supraorbital region on the left side are
deformed, causing the snout to be pulled over toward
that side - out of line with the lower jaw. A large
mass of yolk was still present, and it
contained about 35 white cysts(?), each about
.6 to .8 mm in diameter

Number of spec.	Snout-vent	Tail
3424	26.4 mm	33.0 mm.
3425	25.9 mm.	31.2 mm.
3426	25.2 mm.	32.1 mm.
3427	26.2 mm.	31.0 mm.

Aug. 18 Measurements of eggs of Nests 1, 2 & 3

Nest No. 1 16.8 x 8.4 mm For the past two days I have
14.9 x 8.3 mm noticed that these eggs were
16.6 x 9.5 mm picking up considerable dirt
15.8 x 8.9 mm as if the soil was wet
13.3 x 8.0 mm (shriveled) enough to stick to them.

Today I took them out & washed them, took the wet ^{soil} dirt
out & put barely damp soil in. The eggs are dried
thoroughly before putting them back in. One egg
looks like it has gone bad; others look good.

Nest No. 2 14.3 x 9.2 mm. The soil in this nest has been
consistently drier than that in other nests. This I stay
with this one egg as regularly as the others do.

Eumeces skiltonianus

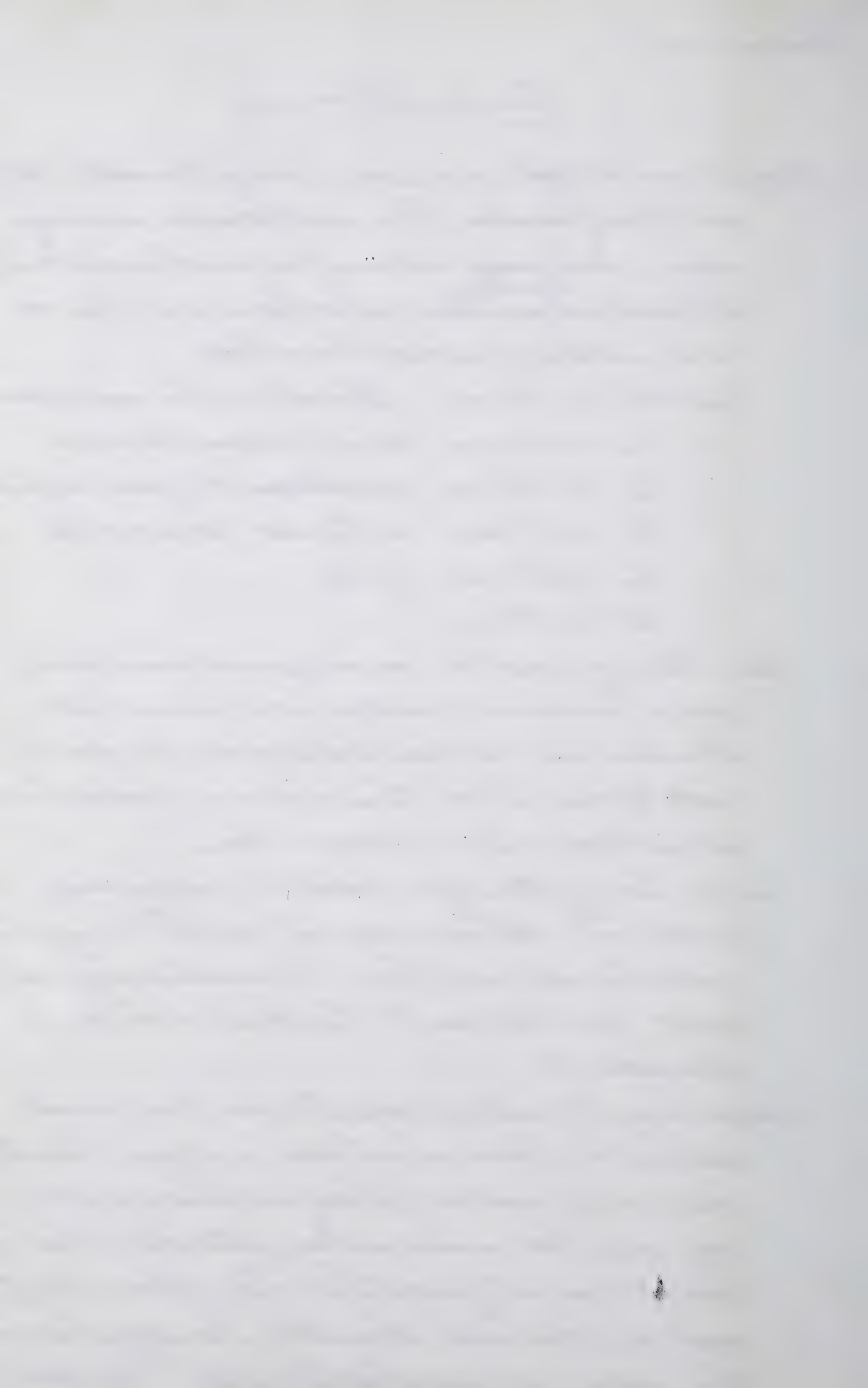
Aug. 18 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif. with their five or six. She is with it every morning when I look, and ^{usually} returns to it within an hour(?); at least not ^{usually} within one half hour, and often seen back with egg several hours later.

Nest No. 3. I 16.1 X 9.6 mm. The soil in this nest appears to be of about the same
 II 14.8 X 9.8 mm. moisture (dryness) as that
 III 15.5 X 9.7 mm. in the nests found in the
 IV 14.1 X 9.2 mm. field.
 V 15.1 X 9.2 mm.
 VI 16.0 X 9.7 mm.

Aug 19 The eggs of nest no. 1 are dirty, and the soil damp, again. Two more of the eggs look somewhat shrunken and all three that appear to be spoiling look pinkish. I took them out and washed them & put in drier soil, then returned them.

Aug 20 Two of the eggs in nest no. 1 are growing mold. The skink was not with the eggs, but under the soil near them. I washed egg no. I in nest no. 3 to see if the skink would abandon it.

Aug. 22 Eggs of nest no. 1 are all spoiled; female seems to have no interest in eggs. Female no. 3114, of nest no. 3, has not disregarded egg no. I that was washed yesterday. That, of course does not prove that female no. 3113, of nest no. 1, did not abandon her eggs because they were all washed Aug. 18. She abandoned



Aug. 22 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
 them when at least two of them had not yet
 shown signs of spoiling.

Sept. 2 Measurements of eggs of nests #2 & #3 (#1
 lost - see Aug 22).

Nest No. 2 14.1 X 8.8 mm.

Nest No. 3	I	16.4 X 10.2 mm.	} Laid July 15
	II	15.3 X 10.2 mm.	
	III	16.1 X 10.1 mm.	
	IV	14.3 X 9.4 mm.	
	V	15.2 X 9.3 mm.	
	VI	16.1 X 10.2 mm.	

Sept. 8 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 On Aug. 23, I went to the ridge SE of Bald Peak
 with Walt Dalquest and Alice Kerr. We spent
 about 2 1/2 hours turning over rocks and picking
 rocks out of the hillsides. I collected 5, ~~and~~ let
 1 get away and saw one running on top (it
 escaped down a crack in the ground) Walt and
 Alice saw 3 others running thru the grass on
 the surface. One of the ones I caught was
 under a rock that could have been turned over
 by hand / not more than 3 or 4" under the ^{surrounding} general
 surface of the ground). The one that got away (a
 young one) was also near the surface. They
 seem to be near the surface again now, as they
 were in May and June and before. Also, if
 what I caught today was taken as an index,



Eumeces skiltonianus

mus. Vert. Zool., Univ., Berkeley, Alameda Co., Calif.

Records of tail and labial color and gonad size in skinks from Berkeley Hills

cont. from p. 17

Date of collection	original number	sketch of gonads	color of tail	other notes
Sept. 6, 1942	T.R. 3438		pink ventrally; few scattered flecks of pale blue dorsally	^{faint} pink tinge on labials belly bluish
" " "	T.R. 3439		no pink; few scattered flecks of blue dorsally	^{faint} pink tinge on labials belly grayish
May 10 - mother of nest no. 1 - killed Sept 14, 1942	~~T.R.~~ W.W.D. 3113		no pink - blue-gray	no pink on labials
May 10 - mother of nest no. 2 - killed Sept 15, 1942	W.W.D. 3115		orange-pink ventrally no blue (brown dorsally)	no pink on labials
May 10 - mother of nest no. 3 - killed Sept 22, 1942	W.W.D. 3114		no pink - gray-blue between scales ventrally; brown dorsally except blue flecks and blue up tip.	no pink on labials
June 21 - never laid any egg - killed Sept. 22, 1942	T.R. 3356		pink ventrally, blue near tip; brown dors., blue near tip	no pink on labials
Sept. 20, 1942	T.R. 3442		gray blue dorsally & ventrally	no pink on labials full of cysts
" " "	T.R. 3442		light blue-gray vent. gray dorsally	pinkish flesh color on labials
Oct. 11, "	T.R. 3448		vent. bright pink (prox.) + blue (distally); dorsally blue, & some pink proximally	no pink on labials
" " "	T.R. 3449		blue dorsally, pink and blue ventrally	"
" " "	T.R. 3450		some gray blue dorsally	"
" " "	T.R. 3451		"	"
Oct. 18 "	T.R. 3452		no pink; blue-gray dorsally, faint gray-blue vent.	no pink on labials
" " "	T.R. 3453		"	"
" " "	T.R. 3454		pink-orange on whole vent. surface. some blue-gray dorsally	"
" " "	T.R. 3455		pink on most of ventral surface; no blue	"
Nov. 8 "	T.R. 3459		bright pink-orange ventrally; no blue dorsally; reg.	"
" " "	T.R. 3460		"	"
" " "	T.R. 3461		bright pink-orange ventrally and extending over dorsal surface. some faint blue spots dorsally	"
" " "	T.R. 3462		bright pink-orange ventrally and extending over dorsal surface. light blue distally ventrally and distal 1/2 dorsally	"
" " "	T.R. 3463		same but brighter blue	"
" " "	T.R. 3464		no pink some scattered blue dorsally	(shedding when caught)
" " "	T.R. 3465		no pink bright blue	"
" " "	T.R. 3466		"	"
" " "	T.R. 3467		"	"
Nov. 26 "	Viola Memmler 149		mottled blue (some orange) dorsally (uniform blue on reg. part. lavender ventrally, med. brown on original part. and all over reg. part.; bright orange laterally on original part.	labials not pink
" " "	V.M. 150		light salmon ventrally - not on 3/8 inch, only on long reg. part.	labials not pink

cont. on p. 54

Eumeces skiltonianus

Sept 8 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
they could be said to be as common as they were in June. Also, the fact that 4 were seen on the surface would seem to support our earlier hunch that they are ~~the~~ more active during the summer ~~than~~ than would seem to be the case judging by the number caught. During the summer months there is much more cover, ~~due to~~ ~~became~~ formed by matted grass and cracks in the ground. In the early spring months the cover is much more limited and the surface rocks make up the greatest part of it. This may explain the more frequent occurrence of skinks under rocks in the early spring, and their apparent greater abundance then. The only other factors that have been observed, that might explain different ^{in surface hiding places that can be looked into} abundance at different times are the tendency for females to stay with the eggs, that may be laid in deeper places, and the appearance of young in August.

Sept 6, Alice Kerr and I went to the same ridge; I found 3 skinks. We heard many animals rustling in the grass that we could not see and felt certain because of the continuous character of the rustle that some were skinks. We spent 2 hours hunting (mostly digging rocks out of the hillsides). This would not substantiate (nor disprove), the assumption made from the experience

Eumeces skiltonianus

Sept. 8 (cont.) Mrs. Vert. Zool, Univ. Calif, Berkeley, Alameda Co, Calif.
of Aug. 23, that the skinks are as common (or active,
or available) now as they were in May and June

Sept. 11 Yesterday, I arranged a thermometer
to ~~indicate~~ indicate temp. inside nest no. 3 (73114)
At 4:00 pm today it read 33° and the therm.
above ground read 26° . This is the
highest temperature I have noted inside a
nest yet, and also, the greatest difference ~~in~~
between temperatures inside and outside nest.

Sept 14 Nest no. 3 Temp. inside nest = 20° ; above ground 22° 9:30 am.

Parent moved all six eggs to opposite (diagonally) corner
of nest. This is the dampest corner. They were in the driest.
I looked at the nest twice Friday and once Saturday.
That was not more than on many other two-day
periods. This corner looks much too damp so I
traded the damp cover of this quarter for a dry one
that has a $\frac{3}{4}$ " hole in it. This may drive her to
move the eggs again, but I ~~am~~ ^{hope} hope it will
allow the soil in that corner to dry out some.
I feel sure the eggs would spoil there.

I have taken 3113 out & pickled her, and
removed the glass plate that separates her
section from the section occupied by 3114
(of nest no. 3). This will allow 3114 twice
the space she has. Egg in Nest No. 2, shriveling; parent still with it.

Sept 15 Nest no. 3 Temp inside nest = 22.5° ; above ground 22.5° 10:00 am.

Eggs moved to SE corner; hole in cover of NE corner plugged with soil.

Eumeces skiltonianus

Sept. 15 (cont.) Mus. Vert., Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Temp. inside nest = 43° ; above ground 33° - 1:10 p.m.

The egg in nest no. 3 are dirty; egg no. III, very dirty. I took it out & tried to wipe the dirt off, but with no success, so I washed it off. I left that section open for about 10 min & it dried some. Egg no. III was returned, and 5 min after the cover was put back on, the temperatures were:

inside nest = 40° ; outside 33° - 1:30 p.m.

" " 44° ; " 32° - 2:30 p.m.

The egg in nest no. 2 disappeared. I killed the parent, WWD 3115, and found the egg in her ~~gut~~ stomach. The stomach also contained 3 large meal worms. I have not put any meal worms in the cage for at least four days, so that makes the ^{possible} supposition that the skink was starving, ate the eggs, then found the meal worms seem improbably correct. If I had just put some in the cage (after a long period during which I had not put any in) it might seem like a plausible supposition. The most likely explanation seems to be that the egg was eaten because it was spoiling. This is supported by the fact that the egg was observed to have shriveled yesterday (Sept. 14) and the fact that the parent of nest no. 5 ate the egg that didn't hatch (sep. 37, Aug 17). The egg contained an embryo that was still about 5 mm. shorter (snout to vent) than one that would be ready to hatch. The embryo was partly spoiled, and fell apart in the pelvic



Eumeces skiltonianus

Sept. 15 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
region when removed, so could not be measured accurately. The shell on the egg was still tough and complete and the egg in slightly more turgid condition than when observed in the nest yesterday.

Temp. inside nest no. 3 = 41° ; outside 30° — 3:00 p.m.

" " " " 38° ; " 29° — 4:00 p.m.

" " " " 34° ; " 27.5° — 5:10 p.m.

Sept. 16 " " " " 19° " 20° — 9:00 a.m.

of nest no. 3
Egg moved to SE corner of NE quarter. No. III very dirty and slightly shrivelled - I took it out & washed it. For the past week, the eggs have been half buried in the bank of a runway or chamber; more so than in the past. In the past they have been more out on top of the soil in the floor of a runway or chamber. The soil seems a little too damp where the eggs are now. The parent was found this morning in the NE quarter of the newly accessible (see p. 43, Sept 14) northern half of the terrarium. She was in a chamber that extended under 3 of the 4 quarters of this half, but that was completely sealed off from the exit (in the NW quarter).

The eggs are in the dampest part of the 4 quarters of the south half. They could not be moved to the north half without carrying them up out of the hole and down the hole of the north half. I have removed all of the cover of the south half so the soil can dry out a little.

[The text in this section is extremely faint and illegible. It appears to be a series of paragraphs or a list, but the content cannot be discerned.]

Eumeces skiltonianus

Sept. 16 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

The covers are put back over the part of the terrarium containing nest no. 3, at 10:30 am (off for about 1 1/4 hour). The soil does not seem too damp now. Temp. 22°C.

Temp. inside nest no. 3 = 39°; outside 30° 1:00 pm.

Parent still in north half of terrarium.

Temp. inside nest no. 3 = 30°; outside 25° 5:15 pm.

Parent still in north half of terrarium.

" " " " " " 8:00 pm

Sept. 17 " " " " " " 8:45 am.

Temp. inside nest no. 3 = 19°; outside 20° " "

Egg no. III more shrunken and pink; other eggs apparently OK. The parent has been in the north half of the terrarium since some time between the afternoon of the 15th and the early morning of the 16th. She could have been confused by the removal of the glass and the similarity of the north half with the south half, and remained in the north half thinking she was in the south half. I am now (9:00 am.) putting her back in the south half.

5:25 pm. Parent still with eggs.

Sept. 18 Parent still with eggs; must have been lost on 16th and 17th when in north half of terrarium. ?

Temp. inside nest no. 3 = 19°; outside 20.5° 9:30 am.

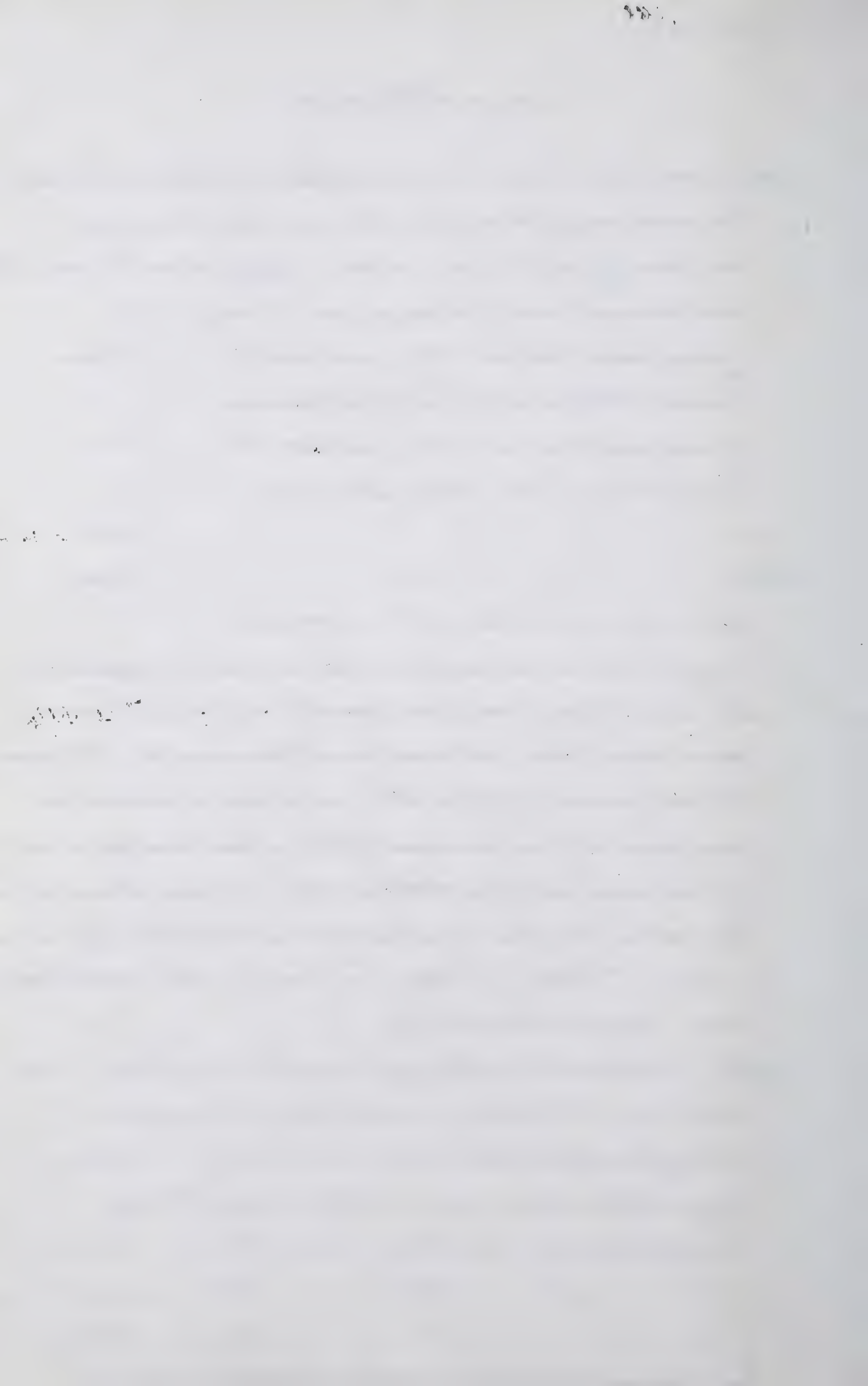
Egg no. III in about same condition as yesterday.

Temp. inside nest no. 3 = 36°; outside 33° 12:10 pm

" " " " 41.5°; " 34.5° 1:30 pm.

" " " " 33° " 28° 4:00 pm.

Parent had moved to N half; I chased her back to south half.



Erneices skiltonianus

Sept. 18, 4:00 pm (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

Egg no I in nest no III was very wet and covered with dirt. I took it out & washed it off. I have suspected before that the moisture that seems to persist on these eggs (see last day of nest no. 1) comes from within them. That is the only way this one (no I) could have gotten that much wetter than the others. This egg also seems less turgid than the others, and it has shrunken; it now measures 16.0×8.8 mm., Sept 2; it measured 16.4×10.2 mm. Maybe the parent lites them, as she was observed to do some strange egg intrusions into the nest; see Noble and Mason (1933), Am. Mus. Novitates, 619.

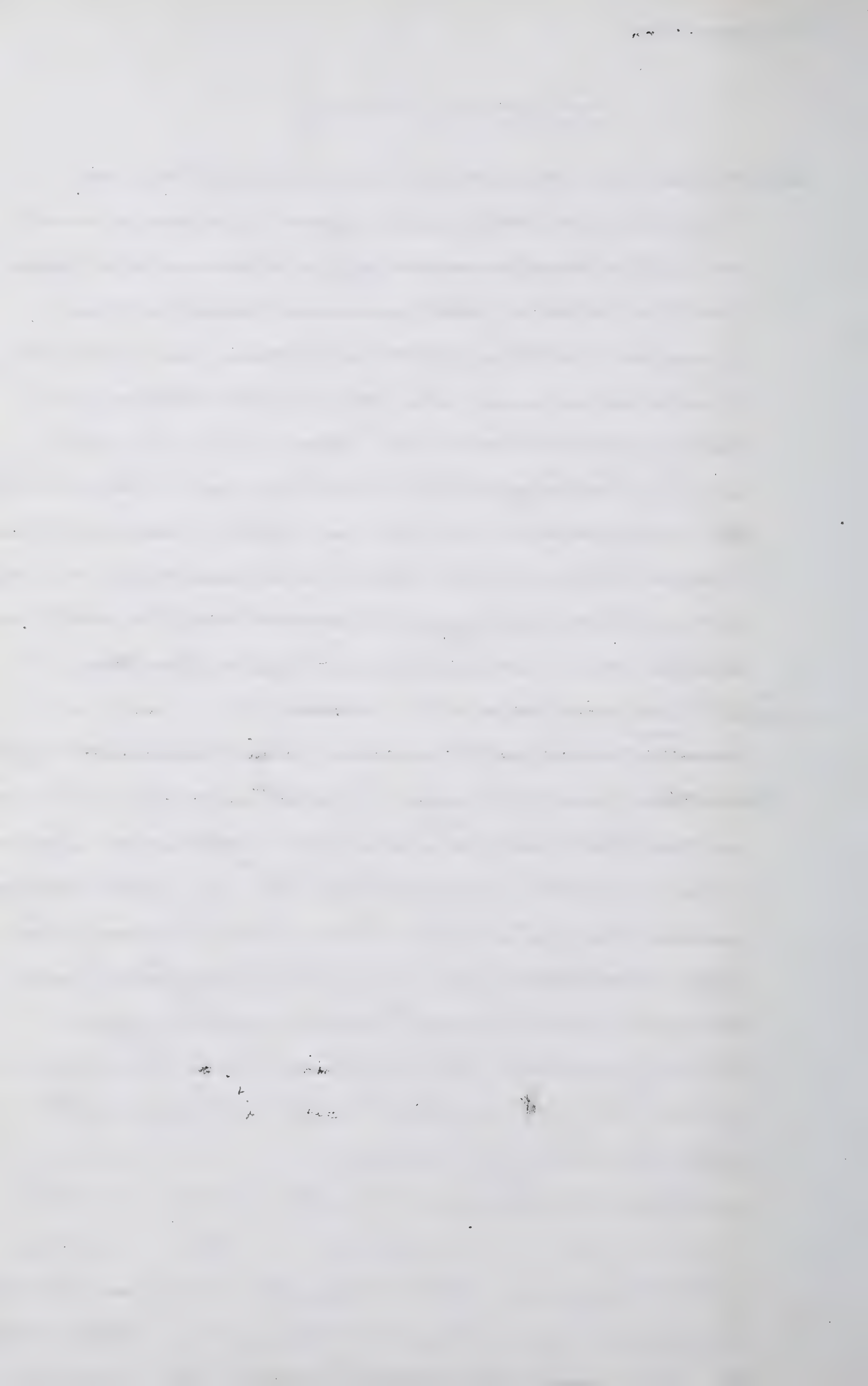
Sept. 19 Temp. inside nest no. 3 = 17° ; outside, 18°

Parent ^{found} in N half at 9:00 am. to-day. I put her back with eggs.

Sept. 21 Parent was with egg. Egg no III was found buried in dirt that had been moved out of the nest. Egg no I had shrunken apparently to the size of the embryos inside. Nos. II, V, and VI were wet. No water has been ~~added~~ to put into this cage for the past two weeks, and the soil around the eggs is barely moist. The moisture must have come from the eggs or the skink. Only egg no II appears normal now.

Temp. inside, ^{nest no 3,} ~~9:30 am~~	17.5° ; outside, 19°	9:30 am.
" " " "	36.5° ; " 28°	1:30 am.

All the eggs were opened and the embryos examined. Embryo no. 3 was least developed, no I next and the others were all about the same. No. II may have



Eumeces skiltonianus

(cont.)

Sept. 21 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 been a little ahead of the others, but ^{even} it was still short of being ready to hatch. None of them were alive. All were opened under water and carefully examined as they were opened, but there was no sign of heart beat or flow of blood; though they looked very fresh and in good condition. The males have the hemipenes everted.

Sept. 22 Mus. Vert. Zool., Univ. Calif., Berkeley - Account of trip of Sept 20, to ridge SE of Bald Peak, Contra Costa Co., Calif. Harold Miller, Alice Kerr, Jean Kerr and I left Berkeley at 8:00 am. and arrived on the ridge at about 8:45. We collected 4 skinks, let one get away that was under a rock, and saw 4 others run down holes or cracks or under matted grass. Again, we are willing to conclude that there are many more active individuals ^{than there} that appears to be, judging from those found under rocks.

Sept. 23 All E. skiltonianus taken before this date, including those kept in captivity have now been killed and preserved. In other words, I do not now have any live skinks of this species on hand.

Oct. ~~Sept~~ 11 Garth Murphy & I spent about two hours on Bald Peak.

Oct. ~~Sept~~ 18 My dad, Garth Murphy, Jacob Frenkel, and I spent about two hours ^{on Bald Peak}. My dad and Garth got 3 each, Jacob got one and I got none. We spent about $\frac{1}{3}$ of our time turning over rocks by hand and $\frac{2}{3}$ digging rocks out with a pick. One skink was taken out from a rock turned

Eumeces skiltonianus

Oct 18 (cont) Bala Peak, San Pablo Ridge, Contra Costa Co., Calif.
over by hand; the others were under rocks that
were much the same but that had to be pried
out with a pick. Since we have hunted here
by hand several times before, it maybe that
those rocks that were loose enough to turn over,
had been turned over before or were too small
or round. None of the specimens were deeper
than under the surface rock & none of the rocks
were more than 10" or 12" thick.

Nov. 11. (Report of trip of Nov. 8) Mrs. Vert. Zool., Univ. Calif., Berkeley, Calif.
Sunday morning, Nov. 8, Jack Charles Sibley and
I went to San Pablo Ridge, about 400 yards north
of Bala Peak, to collect skinks. This was the first
trip for this purpose since Oct 18, and the first
since our first heavy rains. The ground is now
~~more~~ moist, new grass is coming up, last
year's grass is pretty well broken down, and
what use to form a dense "undergrowth" is now
matted down against the ground. Without
speculating as to whether or not skinks in these
hills "activate" during the summer months,
I would like to point out that the cover is
much more restricted to rocks and underground
holes and burrows now than it has been
throughout the summer months, and that that
might account for our finding more skinks
at this time than any time since last spring.

Eumeces skiltonianus

Nov. 11 (cont.) Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
 Two of us collected 13 skinks in 2 hours. Sibley found four adults within an area of $1\frac{1}{2}$ foot diameter and two of them were coiled together. I found ~~three~~ two young and one adult within 3 feet of each other. We never have found such concentrations before. All of these skinks were near the surface (all within 6"). Some were under or beside very small rocks, just under debris.

Nov. 17. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 Two meal worms [the total contents of the stomach of no. 3419 (MV2 38091)] was removed and discarded today.

Nov. 18 (see p. 51)

Nov. 23 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.
 Yesterday, Nov. 22, I dug for skinks on the NW-facing slope of San Pablo Ridge, about 400 yds. N of Bald Peak, for about 45 minutes and got two young ones. I was the only effective collector, being accompanied by my sons Donnie ^(age 7) and Teddy ^(age 5) and Donald ^(age 7) Crowe and Karen Stanek.

Eumeces skiltonianus

Nov. 18, 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
(Nov. 23, exp. 50)

↓ July 8[±], 6 eggs were laid in one nest. August 16, I began to notice that the eggs were more moist than could be accounted for by the moisture added to the vivarium. One by one the eggs appeared very wet, and covered with dirt. They shriveled and mold grew on them. August 22, all the eggs of this nest were spoiled. These eggs were in the nest a total of 39-45 days.

↘ July 11, one egg was laid. September 15, it disappeared. I killed the parent, opened her stomach and found the egg. The embryo was partly spoiled. It was in the nest 65 days.

July 15[±], 5 eggs were laid. September 16, one egg was found wet and shriveled. One by one others appeared wet and shriveled, and the parent appeared to have lost interest in the nest. One or two of the eggs were several times found partly covered with dirt. On September 21, I opened all the eggs (only one still appeared normal, and one was shrunken and dried) under water. The embryos in the three eggs that were least shriveled appeared to be in good condition and nearly to hatching size, but no heart beat or flow of blood could be detected. These eggs were in the nest 62-67 days.

↘ I suspect that after waiting long past the time the eggs should normally hatch, the parents destroy them by biting and breaking them or by eating them.

The above notes, on this page, constitute a brief and possibly incomplete summary of the history of three nests of eggs, laid in a vivarium in my office in M. V. Z. The summary was hurriedly drawn up for a letter to Dr. McTaggart Cowan (Nov. 18, 1942).

↓ Specimen no. 3113; nest no. 1

↘ " " 3115; " " 2

↘ " " 3114; " " 3

Eumeces skiltonianus

Nov. 27, 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 Yesterday, Nov. 26, Harvey Fisher, Viola Memmler, Freddie Fisher (age 4), my boys Sonnie (age 7) and Teddy (age 5), and I looked for skinks on the west-facing slope of San Pablo Ridge, 1700 ft., 400 yds NNW. Bald Peak, Contra Costa Co., Calif. Time spent collecting was equivalent to $4\frac{1}{2}$ man hours. This is the same place that I collected in on Nov. ~~23~~²² and Nov. ~~24~~⁸. We collected 11 skinks. They were all within 10" of the surface. Most of them were cold enough that they did not start to run when first exposed; some of them did, but not fast. All of them warmed up as soon as they were held in our hands for a minute or so and became quite lively. None of them came from under rocks that had been moved before. Most of them were dug out of the porous mixture of light soil and rocks, 3 to 8 inches under the surface. Five were found in one place and three in another where Harvey and I worked together breaking down the bank we had made with our picks. In both places, we started digging the rocks out of an extra steep place in the ~~bank~~ hillside, thus forming a bank that could be broken down easily, working up the hill. The skinks were found under the surface in places where no rocks (a very few & these small) ^{1" to 3" of surface above ground} projected above the surface. The weather was clear, bright and slightly crisp, with a few clouds moving across the blue sky & low fog over the delta region and

Eumeces skiltonianus

Nov. 27, 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
the upper bay. A haze also hung over the rest of the
bay, and in the valleys east of the hills

Dec. 17, 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
This morning Walt Dalquest and I drove out the
Walnut Creek road to a point about $3\frac{1}{4}$ mi. beyond the
tunnel (to a place $13\frac{1}{4}$ mi. SE Bald Peak, 750 ft., Contra Costa
Co., Calif.). We spent about an hour turning over
rocks on the hillside within 100 yards of the
road and got 9 skinks. We did not use a pick.
This was the first time we had collected there.
Conditions there are much damper than in
the places we have been collecting. There is
a big mud slide extending through the area,
with a temporary pond on it and many
boggy spots. However, ~~most~~ all the skinks were
found on higher drier parts. There are many
rocks on the area, most of which probably
came down with the mud. The striking thing about
this day's experience, the great number of
amphibians seen as compared with what was
seen on other trips since last spring. We saw the
first Ensatina, Batrachoseps, and Hyla that
have been seen for several months. We saw
many young Aneides and Batrachoseps.
We caught our first snakes for many trips, also.
One ~~the~~ Conopsis and one small rattlesnake.
The skinks were all in small hollows under

Eumeces skiltonianus

Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Records of tail and labial color and gonad size in skinks from Berkeley Hills.

Date of collection	original number	sketch of gonads	color of tail	other notes
	Harry I. Fisher			
Nov. 26, 1942	680		Dorsally, distal 2/3 blue, proximal light orange in light areas. Ventrally, distal 1/2 lavender, prox 1/3 + bright orange	labials not pink
" " "	681		Dorsally, few small specks of blue. Ventrally, few large patches of light blue along distal half.	" " "
" " "	682		"	" " "
" " "	683		no blue (small speck dorsally); no orange or pink	" " "
" " "	T.R.		Blue tail; some pink on prox 1/3 ventrally.	" " "
" " "	3474		"last years young"	" " "
" " "	3475		"	" " "
" " "	T.R.		all except prox 1/2" reg.; apical ventrally, only on reg. part	" " "
Dec 17, 1942	3476		no pink - pale gray on dorsal side of reg. part.	
" " "	3483		no pink - blue dorsally	bright pink along every edge of labials; (especially anteriorly)
" " "	3484		pale blue ventrally	bright pink along every edge of labials; especially anteriorly
" " "	T.R. 3487		no pink on tail	no pink on labials
" " "	W.W.D.		some light blue	
" " "	T.R. 3488		whole ventral surface of tail and hind legs slightly more yellow than light salmon	
" " "	W.W.D.		Orange, P.I. II, 11, d. like above (3488) but lighter, especially on legs	faint pink on labials
" " "	T.R. 3489			
" " "	W.W.D.			

Continued on p. 56

Eumeces skiltonianus

Dec. 17, 1942 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
(continued report of collecting $1\frac{3}{4}$ mi. SE Bald Peak, 750 ft., C.C. Co.)
rocks, most of them under flat rocks 1" to 3" thick. At least four of them must have been digging recently - judging from loose dirt near them in the hollow. They usually fit the cavity rather snugly. About 6 Sceloporus were seen, all in torpid condition, laid out straight under rocks in loose dirt. Loose dirt was scattered over their backs, making them hard to see at first glance. The weather was cool and ~~over~~ sunny, with tule fog surrounding Mt. Diablo and probably Walnut Creek. Berkeley was overcast with a high fog.

J. Rogers - 1941

Gerrhonotus g. coeruleus

Sept 15. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Color record, from Ridgway, of the sides of an
alligator lizard collected on Waddell Creek (at
Slide Creek), Sept. 14, 1941. M.V.Z. no. 35537. Burnt
Sienna (Pl. II, 9, k).

J. Rodgers - 1942

Lampropeltis getulna boylii

April 21, Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Color of specimen (T.R. 2998) taken 1 mi. W
Michigan Bar, 200 feet, Sacramento County, Calif.,
A light brown specimen, as compared with a
black one collected near Mt. Diablo the same
week. Nearest Mars Brown (Pl XV, 13; m) near
head and tail and in other parts when light is
not shining thru snake. Light shining thru
gives the brown a pinkish cast, especially on sides,
where light comes thru most. "White" rings, nearer
Cream Color (Pl XVI, 19; f) than white
anteriorly and nearer white than Cream
Color posteriorly.

A large L. g. b. that is being kept in captivity by
Walter Dalquest (specimen from near Mt. Diablo)
ate a large Geophonotus m. multi-carinatus and
a small Coluber c. mormon. Sceloporus a. wes
in the cage with it for several days, but none
were taken.

A small L. g. b., taken ~~near~~ in Berkeley Hills, ate a
skink (Eumeces skiltonianus). It has been in
a cage with a Coluber c. mormon of about its size
for days but did not eat it.

J. Rodgers - 1942

Lampropeltis triangulum

June 1 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
(T.R. 3311)
Color record of a specimen, brought into MVZ by
Sherburne L. Cook, Jr., May 29, 1942. It died the night
before. "Red" bands, nearer Pl. XIII, 3', k (Madder
Brown) than Pl. XIII, 3', m (Diamine Brown).
Eye nearer Brick Red (Pl. XIII, 5', k) than
Madder Brown. "White" bands are buffy.

Pituophis sayi

June 21. 1940 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

(get exact locality from letter to Jellison about July 15, 41)
Specimen brought in alive from ~~Bitterroot River~~, Montana,

by Ward C. Russell. Part of accession number 6254. A large adult snake.

Ground color of head. Dorsally, between Sulphine Yellow and Citrine (Pl [V, 21 j); ventrally between white and Ivory Yellow (nearer white) (Pl XXX, 21" g).

Markings on head very dark brown, appearing black except at ^{some} edges of some of the marks.

Dorsal blotches - Anterior 5 ± black; farther back they have brown centers. 8th., Brussels Brown (Pl III, 15 m). Farther back the black borders are replaced by fragmentary darker borders. Center of 16th. blotch, Dresden Brown (Pl XV, 17' k). Farther back, brown becomes redder; 30th. blotch, Cinnamon Brown (Pl XV 15' k). Darker farther back; 42nd. darker than Vandyke Brown (Pl XXVII 11' m), then blending to black on tail.

Interspaces between blotches. Anteriorly, less yellow than Naples Yellow (Pl XVI, 19' d). Become more yellow posteriorly, 25th. Naples Yellow, ~~side~~ to end of tail.

Belly slightly lighter and ~~finely~~ faintly less green than Maritus Yellow (Pl IV, 23 f). Nearer to this than to any other color in the book.

Iris, Martius Yellow posteriorly and other places except in the area shaded in ~~in~~ the diagram.

The crescent-shaped mark is darker than Mummy Brown (Pl XV, 17' m). The posterior ends and edges of the dark crescent are reddish, tho the red and brown are not well defined.



Plethodon dunni

June 1 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Color record of live individual (T.R. 3314) brought in by Frank Peabody. It was sent to him by J. R. Slater, and was collected 2 mi E Stella, Cowlitz Co., Washington, by Slater some time between April 6 & 8, 1942. It was killed by me today and cataloged as MVZ 37358. The broad band of color down the back and on the dorsal side of the legs is finely mottled with black. It is near Olive Lake (Pl XVI, 21', i) but toward Wax Yellow (Pl XVI, 21') on the back. On the top of the legs and in places along the very edge of the band down the back, it is slightly nearer Wax Yellow. On the top of the head it is Old Gold (Pl XVI, 19', i).

Plethopsis wrighti

April 17 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
 Color records of live specimen, MVZ 37355 (T.R. 3239)
 collected by G. H. Wright, April 3, 1942, in woods bordering
 Mt. Hood highway, 8.7 mi. SE Sandy, Clackamas Co., Oregon
 (Type locality). Back between Burnt Umber and
 Walnut Brown (Pl. XXVIII, 9", l). The outer edges of
 the area are lightest and more reddish, nearer
 Prussian Red than Ocher Red (between Pl XXVII,
 5", j and k), as is the dorsal side of the tail. Scattering
 of fine black markings over back and head.
 Irregular dorsolateral lines black, sides gray^V
 mottled with black, belly with more black
 than gray^V. V = brownish on account of light
 internal organs showing through. ^V = silvery gray.
 Peabody made trackways of this individual
 and found that the hind foot drops into the
 front foot track on the second step (secondary
 overlap). Batrachoseps have tertiary overlap.
 This indicates much shorter coupling than in
Batrachoseps. Also, the axis of the foot is thru
 the fourth toe ~~as same~~ ~~than~~ ~~the~~ in this salamander,
 as in Batrachoseps. It runs thru between the
 third and fourth in Plethodon. The feet are
 bigger than those of Batrachoseps.

Rana aurora draytonii

Oct. 13 3 1/2 mi. ENE Petaluma, Sonoma Co., Calif.

Three specimens (J. Rodgers 2705-2707) were collected in a pool of water about 8 ft by 10 ft and averaging 3 feet deep. The pool is in an otherwise dry stream bed east of the road and about 50 feet north of a bridge crossing the stream bed and leading to a farmhouse several hundred yards east of the road. No. 2707 will be skeletonized. ~~It is~~ It is a male, not of breeding condition.

J. Rodgers - 1940

Rana boylei boylei

Oct. 12-13 Austin Creek, 80 ft., 1 mi. S Cazadero, Sonoma Co., Calif.

Yellow-legged frogs were common along the creek. They are highly variable in size which, I suspect, is what one ~~would~~ should expect this time of year i.e. so soon after the breeding season - which is probably long. Some are smooth gray over the back and some are mottled or blotched. T.R. 2700 looks much like muscosa. About one third of the specimens had red on their backs - probably red-leg (disease). Some appeared all reddish brown as a result, and some quite reddish. Where there was not much red on an individual, it was concentrated along the dorso-lateral lines. Nos. 2703 (J. Rodgers) and 3655 (Alden Miller) are among the reddest. 298 (Harvey Fisher) has much red on the back.

J. Rodgers - 1940

Rana catesbeiana

June 4 ex p. 168C

J. Rogers - 1940

Sceloporus o. bi-seriatus

June 5 - see no. 2638

June 10 - see no. 2657

J. Rogers - 1940

Sceloporus^o occidentalis

June 26, sup. 1700 of Itinerary etc.

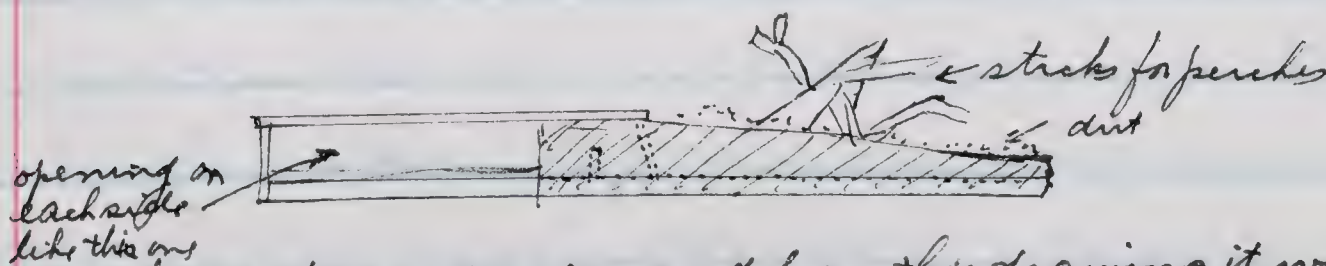
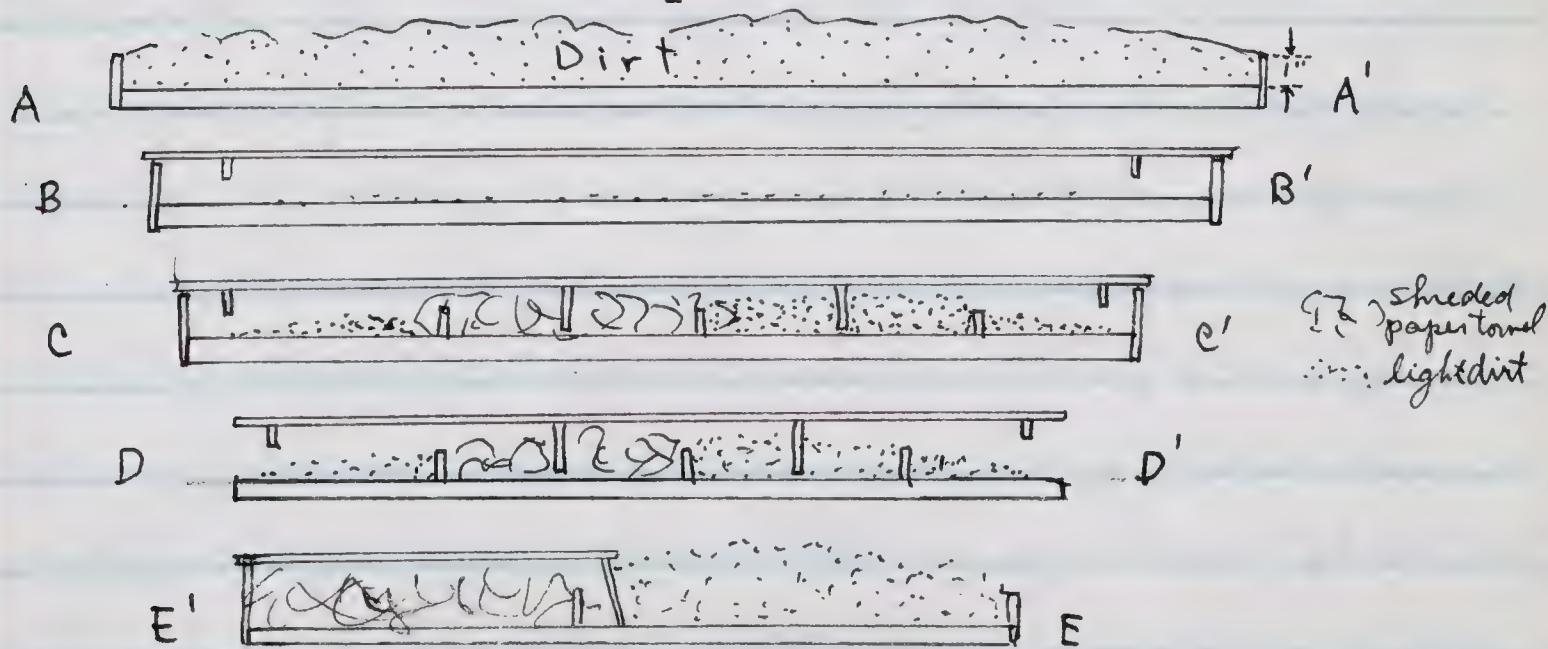
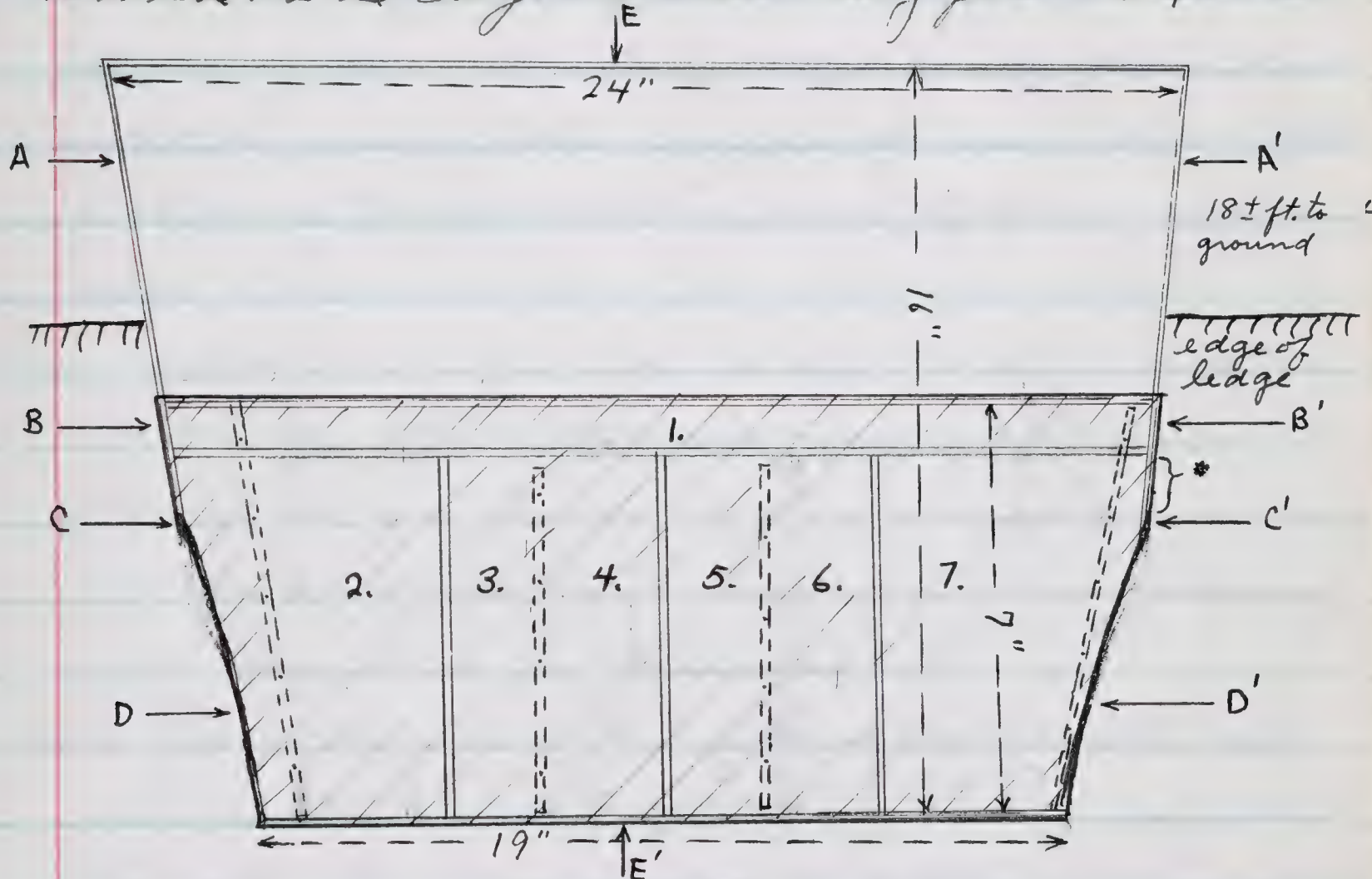
Nov. 11 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Three live specimens on hand at present. Marked, 4RH (♂), 4LH (♀), and forked tail  (♂). They are given my catalogue numbers as follows 4RH (2712), forked tail (2713), 4LH (2714). 2712 ♂ has been in captivity at least 6 months; may have been infested with protozoa by Jacob Frenkel; has been living on ledge outside of window of my office for a month. 2713 ♂ has been in captivity since last May, has been active, and appears to be in good condition. [Though 2712 has been quite active most of the time, there have been periods of a week or two when 2713 (in same cage) dominates him. At least, 2712 didn't get up onto the perches, and lay quietly on the sand. 2712 has never appeared as sleek and fat as 2713]. 2714 ♀ was brought in about 10 days ago, put into a cage, and has been out of sight since then.

2712 has been living on the ledge outside my window for a month or more. He has eaten many meal worms that have been thrown to him, and has actually come inside at least once. Yesterday Saturday (this is Monday) I made a box for the ledge that I figured would give the lizard shelter, loose soil and perches (see diagram on p. 2). This morning, before 2712 had come out of the box, I put 2713 and 2714 in also. It was a cool (about 15° above frost) this morning. It is ~~clear~~ ^{not cloudy but} and slightly

Sceloporus^o occidentalis

Nov. 11 Mrs. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
hazy. It may get warm enough on the ledge
on this south-facing end of the building to bring
the lizards out. When 2714 was dug out of the
sand in the cage she was very flat and dark.



* If this section were removed from this drawing it would be in much nearer true proportion (note 7" as compared with 16" $\updownarrow$).

Sceloporus^o occidentalis

Nov. 11 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.

Early this morning, when I opened the contraption, 2712 was in the compartment that was filled with shreds paper towel.

At 2:15 pm., 2712 and 2713 were out. 2712 was on the dirt, 2713 was on the ledge west of the box. I opened the window suddenly and 2712 ran right off the edge of the dirt and fell to the ground below. He apparently was unhurt. I lifted the lid and found 2713 buried in the dirt in compartment no. 6.

Nov. 13 2712 was the only one out yesterday. It dug under the sand out in the open last night, and came out this morning. I lifted the lid and found 2713 in compartment no. 7 and 2714 in comp. 6, both were buried in the dry dirt (sandy) with their backs partly exposed.

Nov. 16 George Mansfield brought me two males that were collected in Santa Clara Valley some time this fall. I have clipped the 4th toe off the right front foot of one and the 4th toe of the left front foot of the other. Given my nos. 2718 (4RF) and 2719 (4LF).

Nov. 22 Sceloporus on ledge outside window. 2712 ♂ (4RH), 2713 ♂ (forked tail), 2718 ♂ 4RF, ~~and~~ 2719 ♂ (4LF), 2714 ♀ (4LH). The only ones I have seen out since I put them out on the ledge are 2712 ♂ 4RH and 2713 ♂ (forked tail). These are the two that have been in captivity here before I put them out. 2718, 2719 have been in captivity at San Jose State College, but I do not know how long. 2714 ♀ (4LH) was brought in, kept out of sight in a cage inside the window for 2 weeks, was put outside, and has not come out since.

Sceloporus² occidentalis.

Dec. 3 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
About Nov. 28, I looked for nos 2718 (4RF) and 2719 (4LF), the lizards brought to me by George Mansfield, Nov. 16. I could not find them. Apparently they have left. To-day about 4:30 pm. I opened up the retreat and found 2712 ♂, 2713 ♂, and 2714 ♀. No. 2712 was just shedding. No. 2714 has not been out, except when I took her out, since she was put in. No. 2713 has been seen attacking 2712 four or five times in the past three weeks. 2712 usually stays on the dirt most of the time. 2713 comes inside the window every day or two and crawls along between the cages and the window.

Dec. 23 There has been considerable rain the past two days, including some very heavy showers. 1:00 pm. 2712 and 2713 were out. I opened up the retreat and found it very wet inside. No. 2714 was inside, half buried in wet sand.

Dec. 24. 2712 and 2713 have apparently been out all night in the rain. They are huddled (not compactly) into a corner on the concrete shelf and against the concrete wall. They are wet.

Dec. 26. I opened the retreat and found 2712 and 2714 in compartments 3 and 6. 2713 is inside the window. The dry sand put into the retreat Dec. 23 seems to be soaking from the bottom, tho slowly. It is still dry for at least the top 1/4 inch and not very wet below. There have been some hard rain storms

J. Rodgers - 1940

5.

Sceloporus o. occidentalis

Dec. 26. Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
in the last two days

Sceloporus o. occidentalis

Jan. 28 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
Yesterday and to-day all three (2712, 2713, 2714) were all out. The males (2712 & 2713) have been out occasionally but 2714 has not been out since I put her in. 2713 has been ~~bobbing~~ doing push ups both slowly and at high frequency. At about 11:20 am he tried to climb on the back of 2714, but she walked out from under him. 2713 has chased 2712 two times in 20 minutes, 2712 seems to be anxious to keep out of the way.

J. Rogers - 1942

Sceloporus o. occidentalis

Dec 17 1³/₄ mi. SE Bald Peak, 750 ft., Contra Costa Co., Calif.
6 seen in 1 hour of rock turning - all were torpid, see
notes under Eumeces skiltonianus, p. 55.

Sonora accipitalis

Acc. no. 6239; 2629 T. Rodgers; coll. by W. Saarni
at Irua, San Bernardino Co., Calif.

Color records by Ridgway:

Cross bars brown, darker than Prout's Brown (Pl. XV, 15'n) anteriorly, Prout's Brown (Pl. XV, 15m) on most of body and darker (tho not as dark as anteriorly) posteriorly.

Top of head, anterior to brown, between Baryta Yellow and Martins Yellow (Pl. IV, 22f) but grayer. Spaces between brown bars have an indistinct bar of orange separated from the brown bars by narrow light yellow bands. The orange bars are Orange-Beff (Pl. III, 15, a) and the yellow is slightly more yellow than Baryta Yellow (Pl. IV, 21, f).

Sides, along at level of lower ends of brown bars anteriorly are nearly white. Belly Martins Yellow (Pl. IV, 23, f).

The brown bars completely ring the tail and the posterior $\frac{5}{8}$ of the body, tho the ventral part fades anteriorly.

Iriturus similans

Oct. 13 Austin Creek, 80 ft., 1 mi. S Cazadero, Sonoma Co., Calif.
About 15 salamanders were seen in a pool of
the creek at the Berkeley City Camp. I collected
five (with the aid of John Davis and others). They
are entered as 2693 - 2697 in my catalogue. Two of
them will be ^{saved for bugging} ~~cleaned and skinned~~ ^{for} skeletons).
The pool was about 20 feet long, more or less
spindle shaped, 9 feet wide at the widest, and
about four feet deep at the deepest. It was clear
and quiet, with a part of the stream
about 18" across and averaging $1\frac{1}{2}$ " deep entering
at the NW and leaving at the SE where it connects
with the main stream. Most of the main stream
bed is dry and gravelly. Two of the salamanders
were in amplexus.

Triturus torosus

July 5. 2 mi. SE Bald Peak, 1080 $\pm$ ft., Contra Costa Co., Calif.
Alden Miller, Jan McTaggart Cowan, Bob Storer and I
were on this ridge at 6:45 am. looking for skinks.
(see more description under *Eumeces skiltonianus*, p. 20)
Many times in such dry grassy ridges as
this, we have found *Triturus* - most commonly
small ones about the size of my no. 3359 (snout-
vent length 41 mm.). We have always considered it
an extremely dry, hot place for an amphibian.
(we have found *Aneides* at least as commonly
as *Triturus*). The weather was cold enough
this morning to make our hands feel numb,
a strong wind was blowing, and fog was
blowing over the ridge, densely enough to
cut visibility to as little as 30 yards at
times and always to 75 yards or less. The fog
was collecting on the rock that crop out
at points along the ridge and the water was
running down them and dripping from them.
On the talus around one of these outcrops we
found 6 *Triturus*. They were crawling
over the talus. No observation was made of
whether or not they were foraging. One
Aneides was also seen moving about. This
shows that the "hot dry" ridges of the Berkeley
hills are not always hot and dry, and that these
poikilotherms can ~~eat~~ take advantage of the
available moisture even at ~~low~~ low temperature.

Uta stansburiana

Feb. 29 Mus. Vert. Zool., Univ. Calif., Berkeley, Calif.

3:20. Mr. Cunningham brought a honey bee into my office to feed to my lizards. We put it in a cage with 2 Sceloporus o. o. and 2 Uta stansburiana. The largest Uta and the smallest Sceloporus had a chance at it, but paid little attention to it. The largest Sceloporus was eyeing it, when a small (about $\frac{1}{2}$ grown) Uta dashed over from about 10" away and grabbed the bee by the thorax and shook it, let go, sidled around, came in and shook again, moved back and circled around again. The ^{was obviously hurt, but} bee moved around so its abdomen pointed toward the Uta. The Uta grabbed again but let go immediately, and as if it had trouble getting loose. A small part of the posterior part of the abdomen of the bee stuck out of the Uta's mouth. It scrapped its mouth on the ground, and backed about 5 inches away and stood high on all four legs. For the next 6 minutes it stood still, high on its legs but not as high as at first, and twisted its body back and forth as if it was having cramps. It closed its eyes and would keep them closed for 15 or 20 seconds at a time. Toward the end of the 6 minute period it settled forward on its belly as if growing weak but had no sooner settled to the small piece of bark on

Uta stansburiana

Feb. 29 Mus. Vert. Zool., Univ. Calif., Berkeley, Alameda Co., Calif.
which it was standing, then it drew back to a more alert position. I disturbed it by reaching toward it, and it ran 6 or 8 inches ahead. During the next 5 minutes it moved around the cage about as the other lizards did, but tried 3 times to scrape the piece of the bee from its mouth. The bee evidently stung the lizard an eighth of an inch or so inside its mouth.

3:55 The Uta seems perfectly normal, but still has the piece of the bee sticking out of its mouth.

